



Flexibility, Responsiveness Define UGL Services' Relationship with Aerospace Manufacturer

A manufacturer of gas turbine engines used in military and commercial aviation for turboprop and auxiliary power unit applications has relied on UGL Services for more than 12 years to provide manufacturing support services. At its peak, the relationship covered 150 facilities at several locations throughout the U.S. where UGL Services maintained facilities and production equipment for divisions, such as Engines, Gearline, Assembly & Test, Repair & Overhaul, as well as other mission-critical operations.

Over the years, the relationship has evolved to respond to changes in the customer's business and its approach to manufacturing. One constant throughout the relationship has been the flexibility that UGL Services has demonstrated as evidenced in the close working relationship with the customer's management and in the numerous special projects that UGL Services has performed.

Throughout its tenure UGL Services has continually pursued productivity gains and has consistently delivered cost savings of 7%, frequently exceeding that goal.

An Outsourcing Pathfinder

The company maintains the highest standards throughout its manufacturing processes. Consequently, the original decision to outsource production support was not taken lightly. There are Federal Aviation Administration (FAA) requirements and International Organization for Standardization (ISO) standards. "All those aspects of the production had to be thought through," said Doug Koba, UGL Services Account Manager. "Every piece of flight hardware has its own identification and is traceable back to the day and the time of manufacture. Recordkeeping is everything and the whole package has to be supported even by the outsourcing companies."

For instance, there are detailed change-control processes specified by the company and the FAA for cutting fluids and lubricants that must be followed. "Anytime we make a change, we have to either present proof of certification or run the potential products for a number of months in order to establish baselines for it," explained Koba.

From the outset UGL Services proved that outsourcing is an efficient, cost-effective approach that maintains quality. "We were the ones that proved that the concept worked, that there was money that could be saved, and that it was possible to truly integrate," commented Koba. The outsourcing model has since been applied to several other company locations and to other functions.

PROJECT SUMMARY

Customer: *Aerospace manufacturer*

Situation: *Sought a reliable outsource partner that could provide facilities and production maintenance services.*

UGL Services response: *UGL Services has served the account for 12 years and in that time has supported many special projects.*

Results: *UGL Services continues to serve the customer, responding to special projects while delivering continual cost reductions.*

One of the ways that UGL Services supports the company's operations is by developing expertise in the machines used by the customer and in fluid management for lubricants, as well as the maintenance of furnaces, electronics and vacuum systems.

It also participated in the company's larger production and quality initiatives. UGL Services was an integral player in the company's Total Productive Maintenance (TPM) program to increase quality and uptime.

When asked to support TPM, UGL Services chose to self-perform the service rather than turn to a specialist subcontractor. Kent Walton, currently UGL Services Director of Operations, was hired, along with another specialist, to manage the process. Explained Walton, "This benefited the company. Rather than work as consultants that were coming in two-to-three days a week or coming for a week here or there, we lived at the site every single day for several years so there was continuity to the project."

UGL Services developed another key component of TPM, the customized Operator Safety Check (OSC) program that is a standardized safety check that operators go through at the beginning of their shifts to ensure that all the safety equipment on their machine is in place and operating correctly. The operators do the basic maintenance checks; it changes their mindset to become more aware and engaged in the safety and quality programs. "They check oil and fluid levels. Items that aren't technically difficult, but are critical to the safe and efficient operation of the machine tools," said Walton.

A "Can Do" Approach

Perhaps UGL Services' relationship with the aerospace company is best defined by its flexibility and responsiveness. Over the years, UGL Services has taken on scores of special projects to address specific problems, respond to emergencies or improve production. "Other companies would say, 'Give us a couple of years, and we'll figure out how to do that.' With us, they give it to us one month, and we've got people in boots on the ground making it happen for them," said Walton.

A few examples demonstrate this commitment to flexible operations:

- A 200,000 sq. ft. facility with 30 ft. walls that were soiled from years of exposure to machine oils required painting. The company approached UGL Services and requested that the job be completed in 12 days. UGL Services put a crew of cleaners and painters in on a graveyard shift and completed the project on budget in just eight days without disrupting production.
- The company wanted to place pans under virtually every machine tool to eliminate machine oil seepage. UGL Services devised a plan to disconnect several hundred machines from power and fluid supply lines, drain and lift them, and then reconnect, level and recommission them throughout the plants. "In addition to our existing machine cleaners and oiler techs, we brought in 14 maintenance techs with electronics, electrician or general maintenance skills specifically for the project. Several of them stayed on as either UGL Services or company employees," said Koba.
- At one plant on the East Coast, a 4,000-gallon shipment of Stoddard solvent, a cleaning agent, provided by the chemical management vendor was defective and could not be replaced quickly enough to avoid a production shut down. The plant manager asked UGL Services if there was any way that they could get 4,000 gallons of the solvent in a day or a day and a half. Koba explained, "We located it in California and had it shipped across the country in less than 36 hours to keep the plant up and running."
- Over the years the company has moved some production to China, Mexico and the Czech Republic. UGL Services was charged with preparing machines for transport. UGL Services staff took them offline, drained the fluids, secured components, such as pollution control devices, air cleaners, etc., and prepared the packages for shipment. In addition, they included the TPM and

OSC documentation to support training and operations on the other end. “The existing TPM protocols provided the package of standards for inspecting the machines, lubing them and keeping them in good operating order so that the folks at the other end would have a pretty good idea of how to keep the machinery running,” commented Walton.

Supporting Customer Initiatives

UGL Services has also been heavily involved in supporting several quality and safety programs at many of the customer’s sites. The company has an “operating system” that applies to everything from manufacturing, to Employee Health & Safety (EH&S), to finance and back office operations. In manufacturing, the operating system crosses lean manufacturing with Six Sigma and the TPM; it also includes process mapping to improve productivity.

UGL Services also supports the company’s Voluntary Protection Program. VPP is an Occupational Safety and Health Administration (OSHA) health and safety process that requires companies to demonstrate a strong management and employee safety culture that ensures a safe and healthful workplace environment, with occupational injury and illness incidence rates below the state and national averages for companies within the same industry classification.

Cost Savings

While carrying out all of these special initiatives, UGL Services has continued to provide ongoing maintenance services involving hundreds of projects and thousands of work orders to improve reliability and quality while driving down costs. Every year UGL Services has delivered cost savings that significantly exceed the budget goals of a 7% cost reduction.

Year	% Savings over Target Reduction
2006	88%
2007	32%
2008	204%
2009	143%
2010	222%

The combination of quality services, flexibility and responsiveness to customer needs, as well as cost efficiency, have been constants in the relationship. “This is a textbook case of close work between a precision manufacturer and a service contractor. We have met or exceeded all of our goals and the net result has been a longstanding, productive and profitable relationship over 12 years,” concluded Walton.