## Finisher's Think Tank



Stephen F. Rudy, CEF Enequist Chemical Co. 100 Varick Avenue Brooklyn, NY 11237 718/497-1200 E-mail: sfrudy@optonline.net

## Some Basic Facts About NADCAP

NADCAP is the abbreviation for National Aerospace and Defense Contractors Accreditation Program. It is a manufacturing standard that is required for suppliers of manufacturing, finishing, and raw materials, to aerospace and similar high tech industries. NADCAP is an industrymanaged system that monitors for and develops compliance and conformance as a standardized approach. Certification or approval of a company is based on a consensus of industry members. This group is composed of suppliers to the major aerospace equipment manufacturers, or OEMs.

There is a comprehensive grouping of metal finishers that provide services to aerospace OEMs. These include: plating, painting and organic coatings, anodizing, chemical etching and milling, electropolishing, phosphating, passivation, cleaning and activation. Many of these suppliers may already have specific quality and procedural specifications in place, based on the requirements of their customer OEMs. Therefore, NADCAP certification may not be difficult to obtain.

An important requirement to be a supplier to aerospace OEMs is to maintain and adhere to a quality management system. Because of the critical nature for specialized finishing (tolerances, thicknesses, corrosion protection, lubricity, etc.), such processes usually require certifications. NADCAP is a systematic program that provides the required certification. Suppliers, their customers, and government personnel join together as a committee to make NADCAP operate efficiently. Perhaps most important is developing the criteria for accreditation. Acknowledged experts in their fields, developing and setting in place readily understandable, yet strict standards, essentially accomplish this. Audits, a necessity for NADCAP compliance, are thorough, in depth, and formulated to ensure that all requirements for the

particular process are met. Standards for the audit are in unison with the Society of Automotive Engineers (SAE), accepted by the Aerospace Standards (AS). By having related industry participants working together, the valued certification is actually one benefit of the audit process. Being in compliance means not only that quality has improved and now meets a more rigorous standard, but that related operating costs could be reduced as well. NADCAP compliance, because of its high quality platform, can also result in less audits of the supplier. This is contingent upon there not being an excess of non-conformances or corrective actions. Off-shoot benefits include continual process improvement, increasing the value of goods and services, and forging better, or solidifying relationships between OEMs and their suppliers.

The Performance Review Institute (PRI) administers NADCAP. This group is in union with SAE. PRI is non-profit. Its focus is only to maintain and direct unbiased efforts for product and manufacturing process assessments and certifications. Audits are scheduled by PRI, which assigns a qualified auditor. PRI is the only approved auditor for NADCAP. The audit adheres to a set of approved items that have been standardized by PRI. Similar to an ISO procedure, the NADCAP audit highlights any non-conformances in the on-site report. The non-conformance reports (NCRs) are submitted to the client. There is typically a thirty-day period for response to the NCRs. The independent auditors from the PRI review and approve corrective action. Every non-conformance must be closed before NADCAP certification can be determined. The next step is for the client to receive final certification from the NADCAP management council, which is comprised of technical personnel, representing member NADCAP companies. These final reviewers are also referred to as

the special process task force. Incidentally, this group also decides the NADCAP audit criteria.

NADCAP auditors are selected based on their experience in the aerospace industry, which normally is at least 30 years. They are acknowledged for accomplishments, technical expertise, and education. Qualified auditors are assigned to field evaluations based on their technical match to the client's operation. The auditors are independent in that they are impartial to the company evaluation assigned. They are evaluated on an annual basis to promote optimum performance and on going expertise for the specified assignment.

NADCAP has become an important criterion for suppliers doing business with major aerospace OEMs. Having the specification has almost become a necessary item for the supplier. Aside from forging the customer / supplier relationship, NADCAP also provides important value added benefits. Overall process control and compliance is supplemented by active participation in NADCAP. This is in the form of participation in audit development and related requirements, national/international marketing, and timely industry communication. Once a supplier is NADCAP certified, they have a strong voice in implementation and maintenance of the program.

NADCAP certification is not geared towards every supplier, just specialized to those who provide finished parts, processes, and services to aerospace OEMs. The trend towards certifications, meeting specifications, and acknowledging a solid business practice in place, has blossomed since ISO was introduced. "Say what you do, do what you say," has become a catch phrase for various specifications. NADCAP is one particular specification that is industry specific, but also requires member companies to help maintain it. *P&SF*