

AJIT PRABHU

STAR OF INDIA

Defense procurement is big business in India. The country is buying warships, submarines, missile systems and aircraft. Offsets are a major part of procurement requirements, as much as 50% of the value of some contracts. One company benefiting from India's booming aerospace sector and its offsets is Quality Engineering & Software Technologies LLC. (Quest), which provides design, engineering and manufacturing services in India and five other countries. Formed in Bangalore in 1997 by Ajit Prabhu, CEO, and Aravind Melligeri, president, Quest, now based in East Hartford, Conn., posted sales of \$34.4 million in 2007. Quest provides key benefits to companies doing business with India: It manages design projects from concept to production (Quest has AS9100 certification for aerospace design and manufacturing); reduces costs by moving work to India, its largest operations branch; and qualifies for offsets. Quest is a new breed of company in India, one that leverages its design and engineering services to source business worldwide, in the process developing an array of technology. Prabhu met recently in New York with Contributing Editor Pat Toensmeier to talk about Quest's strategy and plans. The questions begin with India's pending \$10-billion program to procure 126 fighter jets (DTI October 2007, p. 22).

Defense Technology International: What impact will India's medium multirole combat aircraft program have on Quest?

Ajit Prabhu: Whoever wins the contract will have offset obligations. The offsets can be met by technology transfer or buying parts. India is going to be demanding more technology transfer. This is a long-term strategic interest for India, which wants to build its technological competence. To fulfill this, companies can establish captive centers for manufacturing, partner with local companies in joint ventures or outsource. If they decide on a joint venture or outsourcing, Quest is in a great position to support

them. We provide services that extend from concept design to detail design of test systems, components and avionics. We also have [precision machining] capabilities. Quest has created a special economic zone in India. It's 300 acres and caters to companies that work with us in joint ventures or seek to establish their own operations.

How involved is Quest with military contracts?

We do a lot of military work. We are on the Joint Strike Fighter program.

What are you doing for the JSF?

Most of the work is in engines. [Prime contractor] Pratt & Whitney is one of our largest customers. We do a lot of work relating to engine hardware development, the core part and externals.

Are you looking to expand in defense aerospace?

We want to keep a healthy balance between the military and commercial sectors. India's economic growth is going to drive defense procurement and civil aviation. Several of our contracts involve substantial numbers in the commercial aviation field. We plan to support companies through defense offsets and companies that will be selling commercial planes.

What proportion of your business is aerospace?

Quest has about 1,400 engineers and 550 of them are working in aerospace, almost one-third of our business. The outlook for aerospace is strong over the next two years. We expect to double our head count in this area of business. We have good reason for optimism since Quest is registering about 40% growth year over year in aerospace. This year, about \$17 million will come from aerospace. Overall, we

are projecting gross sales in 2008 of \$51 million. We expect our aerospace business to grow to \$35 million in the next two years.

What portion of aerospace growth this year will be from defense?

I would say that about \$5-6 million will be defense, or one-third, so two-thirds will be commercial. Defense is actually



growing faster than commercial. I believe that the defense side of our business could also grow by 100%.

Is your defense aviation work focused on India?

It is not necessarily for India. There is a continuing discussion about how U.S. defense spending is going to decline and defense contractors will need to be smarter in reducing their cost structures to maintain profitability. They're finding that this means looking at India for offsets initially, but once relationships get established, that will become the way they do business.

How much could an aerospace company save by working with Quest?

Savings of 30-40% over two years are a reasonable expectation. The wage and build-rate differences are higher, but the actual savings are not big in the initial stages because both companies need to learn each other's way of doing things and it takes time to come up to speed.

Do you see Quest playing a role in the development of India's defense industry?

The value we bring to the table is cost. There is so much opportunity for us using our value advantage to create global business—more so than focusing on Indian industry. The value addition is not there as much for the local companies. Most of our growth will be with companies in the U.S. and Europe, some of which may want to expand in India.

replace GE's F404 engine [in the Tejas fighter from Hindustan Aeronautics Ltd.]. All the things India has done [in aerospace and defense technology] are primarily due to the government taking the initiative for self-reliance. Industry hasn't developed like in the U.S. Companies are primarily buyers rather than creators. This doesn't mean that's how it will always be. But I don't see it changing now.

Is India's socialist style of business changing as it builds the defense industry and manufacturing infrastructure?

Definitely. The government is promoting privatization of the defense industry. Offset obligations were once met by HAL (Hindustan Aeronautics Ltd.), one of the largest defense and aerospace companies in India, which is owned by the government. The new offsets will

military or commercial programs, we will support them.

It's easier for us to support commercial than military programs because military has wider restrictions and export controls. Sometimes we get permission from the U.S. State Dept. to work on technology in India. If we don't get an export license, we execute locally in the country where we get the business. Our operation in East Hartford, Conn., for example, is staffed by American citizens.

So having offices in countries like the U.S. is an asset?

It helps in three ways. One is that in India you find a lot of low-cost, young workers—you don't find people with 20 years of experience because industry hasn't been there that long. A local office helps us bring those talented people on board. Second, customers get a single window in terms of Quest's ability to support export and non-export projects, instead of looking for a company that does only local or global work. Few companies do both. Third, customers don't want to manage resources remotely. They want us to do program management sitting next to them. We take the burden of managing internally off of them.

Does Quest play a role in India's space program?

No, and I'm not sure we want to. We work in areas where we have the skills. We don't see this as a viable area.

What is your outlook for aviation and defense work?

I believe that because of our cost advantage, India's economic growth and its appetite for defense and commercial aviation, these are going to be great opportunities. India will continue to invest in this area. The aerospace market will grow in India until at least 2014-15. We are uniquely positioned to capitalize on this growth due to our local and global approach and our strategy, which expands across design and manufacturing services. Aerospace companies will enter India to meet offsets, but the cost advantage will make them stay. OEMs like to work with firms that offer innovative design and build solutions. At the end of the day, when they have a complete package to design and build, we'll be the first to pick up that package and offer a total solution. We're very gung-ho for the future. ■

AJIT PRABHU

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Age: 37

Birthplace: Mangalore, Karnataka, India

Education: B.S. in mechanical engineering, Karnataka University; M.S., mechanical engineering, Old Dominion University, Norfolk, Va.; M.S., biomechanical engineering, Rensselaer Polytechnic Institute, Troy, N.Y.

Background: Joined GE Corporate R&D Center, Schenectady, N.Y., in 1995; co-founded Quest in 1997 in Bangalore with GE as first customer. Set up offices in six countries; moved headquarters to U.S. Launched joint venture to process metals with Magellan Aerospace in 2007; formed Quest SEZ Pvt. Ltd. the same year to run 300-acre economic zone in Belgaum, Karnataka. Married, with three daughters.

How will India's defense industry develop technology, through intellectual property transfer or from local companies developing proprietary technology?

Indian companies are still some way from developing their own intellectual property (IP). Most of the IP development is happening through the government. You don't see a lot of private companies in India developing technology. A lot of them are service organizations that support other companies and their IP. If you look at GTRE (Gas Turbine Research Establishment, Bangalore), it spent \$500 million on the Kaveri turbofan engine to

no longer be automatically fulfilled by HAL, so private companies can claim offset credits.

What are your plans for getting work on European and U.S. defense aerospace projects?

Most of the way we approach things is not based on programs but customers. We want to work with certain customers. We look at the top 50 companies in areas we want to be in. Our customers include Pratt & Whitney, GE, United Technologies, Hamilton Sundstrand, Rolls-Royce. We want to establish relationships, and once our customers win