



Fast talk

Demand for communications capability in all sectors, especially the military, needs an innovative and efficient response.

EMS Technologies, Inc. has sharpened its act to a fine point, as Ruari McCallion learns from President and CEO Al Hansen

During the 1990s, it seemed that hardly a week went by without a commercial communications satellite being launched from somewhere around the world. The end result was a surplus of commercial capacity; the military, however, was seeing its need for communications capacity moving into overdrive. Unfortunately, the supplier sector wasn't keeping up.

"Four years ago, every program in our space organization was behind schedule or over cost," says Al Hansen, President and CEO of EMS Technologies. "Today, none are." That could be achieved in one of two ways: improvement in processes or collapse in orders. Anyone who thinks the latter is the case hasn't been following world affairs. September 11, Afghanistan, Iraq, and areas of conflict the US is not directly involved with have raised the pressure to deliver sky-high communications. So, if EMS was faced with problems in on-cost delivery, it had to do something pretty crucial, pretty quickly. What better step to take than to recruit a retired four-star USAF general, who had his own consultancy and had worked with the team at MIT that developed the concept of lean manufacturing? As well as 37 years in the USAF, Hansen's impressive resume includes spells as corporate vice-president and executive vice-president with Lockheed Martin companies. While he was commander of the Air Force Logistics Command, he received the Presidential Quality Award and the Secretary of the Air Force Eugene Zuckert Award for exceptional management in his organization. Altogether, he's a useful guy to have on your side.

But even the best-qualified CEO or COO is only one person. The approach by many US companies to business problems has been described as a culture of hiring superstar managers to try to fix broken processes. There are those who believe that approach is doomed to failure, and it has to be conceded that most examples support them. The better approach is to have "bulletproof systems that enable ordinary people to deliver outstanding results," according to James Womack, of the Lean Enterprise Institute. Hansen agrees. When he became CEO of EMS in 2001, the company introduced its business process improvement (BPI) program, initially at EMS Wireless, a leading force in RF solutions. Its immediate objective was to reduce lead times; in short order, it got them down from five weeks, the industry norm, to one. EMS'



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Above

A project engineer at EMS Technologies works on cutting-edge technology design

current BPI project is aimed at reducing costs by 25 percent across the board. Its LXE company, which makes rugged mobile computing products, has cut overtime 57 percent, reduced headcount by 25 percent and cut cycle time from 12.5 days to just six.

EMS Technologies was established in 1968, initially as a component engineering house, and shifted its focus to electronic systems when it won a contract within the Milstar satellite program, a joint service satellite communications system that provides secure, jam resistant, worldwide communications to meet essential wartime requirements for high priority military users. EMS has developed a particular emphasis on secure communications, all the way to the highest levels of the military and government. It has put high-speed video, data, and voice communications on Air Force One and Two and built switches for the Predator unmanned aircraft. On the commercial side, it has developed high-speed communications systems for executive jets and is working on a similar system with Airbus. The new equipment will use the greatly increased capacity of the fourth-generation Inmarsat satellite network.

EMS is a \$400 million-a-year company, employing around 1,600 people across the world. As well as high-speed communications work, it manufactures and sells defense and commercial space electronics systems, cellular/PCS, antennas and in-building repeaters, broadband hubs and terminals for healthcare and remote education applications, and rugged mobile computers and wireless networks for supply chain execution made in plants in Atlanta, in Ottawa and Montreal, Canada, in Brazil, and in Tewkesbury, England. The BPI program is essential in maintaining its leadership and profitability in its highly competitive chosen markets. Hansen reiterated the role of employees in making EMS process improvements a success.

He explains that EMS' BPI is about getting the people involved, with the focus on eliminating waste and delivering quality, on time, and to cost.

"Our whole focus is to get quality in the hands of our people. To empower them, we will pre-approve any ideas that come out of our process action teams. That's a powerful tool: empowerment is something a lot of programs don't have. That leads to employee frustration; we take ideas through the suggestion program straight to the BPI process action teams, and we give feedback," says



Hansen. The teams consist of six to nine people and projects run no longer than six months. The system works. "We've used some Kaizen blitz approaches with success. Teams get together to intensify their efforts; they're prepared to work long hours to come up with the ideas, and we recently had two teams identify nearly \$3.5 million of savings." But cost savings aren't the sole focus. Hansen maintains that good ideas that improve the process will, inevitably, generate savings.

"I don't believe it's a good idea to simply focus on the dollar; it's other things that deliver the real improvements," Hansen says. Improving the process means that EMS can keep manufacturing in the US. "We don't have to outsource the work of our EMS Wireless division to Mexico, for example, because we're improving our efficiency right here." EMS invests about 10 percent of revenues in R&D, year-on-year; the research content that comes with contracts boosts that figure up to about 14 percent in total. The results demonstrate that the company's approach is worth it. Revenues as a whole have seen 20 percent revenue improvement; the Ottawa factory is up 40 percent.

"Process improvement will give the long-term efficiency: cost-cutting is short-term," Hansen says. "If you improve the process and document it, it's there forever. If you have robust processes and meet schedules, the costs will take care of themselves." ■