

I-Connect007
GOOD FOR THE INDUSTRY

ENGINEERING SOLUTIONS FOR PCB MANUFACTURING

SMT[®]

M A G A Z I N E

SEPTEMBER 2016

**The Blackfox Advanced
Manufacturing Program
for Military Veterans**

p.18

**Asteelflash on Mil/Aero
Challenges, ITAR
Compliance, and
Opportunities**

p.24

And Much More!

MILITARY and AEROSPACE



Geek-a-Palooza
Who says doing business
can't be fun?
geek-a-palooza.com



The Blackfox Advanced Manufacturing Program for Military Veterans

by **Allen Dill**

BLACKFOX TRAINING INSTITUTE

Today there is a critical shortage of qualified workers. Worker shortages, as well as skill gaps and low unemployment rates, are making it very difficult to recruit talent.

Additionally, finding the right mix of intelligence, talent, work ethic, and cultural fit in an employee is no easy task. Employers are struggling to find just the right employee for a particular position, and are considering broadening their reach by recruiting trained military veterans.

You might be wondering why you should hire a military veteran, especially if your company has nothing to do with the military. According to *Business Insider*, there is a wealth of benefits that comes with hiring veterans. These benefits are summarized below.

Veterans value hard work. When on deployment, you work every single day with almost no breaks. The military instills a culture of accomplishment, which is very much ingrained in veterans. They take their responsibilities very

seriously, they value commitment, and they carry out their assigned tasks with utmost precision.

The military also instills strong leadership skills. As one advances through the military's ranks, the burden of leadership increases. Veterans therefore have a deep understanding of the importance of cooperation and personal development to the success of a project.

In addition, the military helps one develop a strong intuition, given that military personnel often have to make quick decisions that could have life-or-death consequences.

Veterans have a questioning and honest mentality and openly express when something is wrong. They are not afraid to challenge ideas and to offer alternatives, which is an asset in any organization. They are also more likely than other demographics to start their own businesses, giving them the acumen and resourcefulness to help companies grow quickly from the inside.

The government sometimes pays for veteran education, so veterans can excel at their careers and consistently improve their knowledge

while on the job through continuing education programs, such as those offered by Blackfox. In addition, employers can receive Department of Defense credits and, depending on the state, payroll tax incentives and subsidies.

In an attempt to address this skilled labor shortage in the electronics industry, Blackfox has launched a program to prepare military veterans (and civilians) for employment.

Blackfox Training Institute, as an approved technical training center for eligible veterans launched a new training program in 2013. The “Blackfox Veteran’s Training Program” is the first program of its kind to provide veterans with little to no industry experience with the skills to grow their careers in the electronic assembly industry. Upon completion of the course, veterans can qualify for employment in aerospace, defense, medical, and all facets of electronic manufacturing.

.....

“ Upon completion of the course, veterans can qualify for employment in aerospace, defense, medical, and all facets of electronic manufacturing. ”

.....

Blackfox prepares military veterans for employment supported by approval under the provisions of “Title 38, United States Code” and recognition by the State of Colorado as an approved private occupational school qualifies Blackfox as a training center for eligible veterans wanting to use their GI Bill for educational benefits.

This program has been mostly funded through State and Federal training grants. There is no cost to the veteran. There is no cost to the employer whatsoever. As a matter of fact, we have not had any veterans in this program tap into their post-9/11 GI Bill benefits. It’s all been funded through State and Federal grants so far.

What is amazing is how many employers aren’t aware of this program.

This program was initially developed by Blackfox Training in cooperation with Lockheed Martin and the first program of its type to prepare veterans who have military electronics experience, as well as those who have little or no industry experience, with the skills training and certifications that enable them to enter and create a career path in this growing aerospace/defense industry.

The program was funded through the Colorado Department of Labor and Employment and has depended particularly on cooperation with Arapahoe, Denver, Douglas, Jefferson and El Paso counties’ Workforce Centers.

I am very passionate about our program as it provides our military veterans an opportunity for a career path as a civilian. We work in conjunction and collaboration with various State Departments. Right now, we are primarily working with the Colorado State Department of Labor and Employment, Veteran Services Group, and with manufacturers that want to hire qualified people. We use the state agencies for recruiting veterans, who are transitioning or underemployed and want a career in electronic manufacturing. County agencies go through the list of interested individuals and select a group; they assess these individuals for their interest and their ability for this type of industry. Applicants then come to Blackfox, and we filter their interest and ability with skill-based assessments. Those individuals that express interest and ability are then scheduled for upcoming training sessions.

This is our third year, and it’s going well. We’ve trained and certified over a 120 individuals and of these graduates, roughly 80% have made it through the program at a class-three level. All of the technical curriculum is developed at an IPC class-three level, the most stringent class, for mostly aerospace companies. The course curriculum is designed and developed based upon industry standards and input from our partnering employers to ensure that the curriculum addresses all of their specific and unique skill requirements. Lockheed Martin in Littleton, Colorado was our first employer to step up and really want to be a part

of this program. Today, we have over a dozen of Colorado's top employers partnering in this program!

During this whole process, the employer that we work with has an opportunity to come in and meet with the veterans and interview with them. They can start the process running in parallel with the training for background checks and all the other things they require. By the time the veteran graduates, they're ready to go to work.

Richard Toya, manager of the Lockheed Martin-Blackfox Partnership, and a veteran who has been with Lockheed Martin since 2008 had this to say about the program:

"The goal is to create and maintain a top-of-the-notch talent pipeline for Lockheed Martin Space Systems, for our Electronics Manufacturing Facility. The aerospace industry is growing very rapidly here in Colorado and we reached out to Blackfox to customize a program with a good curriculum to develop the talent we need for our critical electronics assembly work."

At the program's inception, Lockheed says it found that the Denver manufacturing pool wasn't big or deep, but noted that there were 500 people per month coming out of the military in Colorado needing to transition to civilian life. The firm made a decision to focus on training veterans in the electronics certification needed for its space programs. Some 65% of those entering the program are veterans.

Graduates of the five-week program come out with nine Blackfox skillset certifications, known in the industry as IPC certifications. While several are needed for work in the Lockheed Martin EMF, others are marketable across other manufacturing categories outside aerospace.

"We'd love to keep every graduate, if not at Lockheed Martin, then within the robust aerospace industry here in Colorado," said Toya. "But the certifications are mobile for up to two years with the employee and these skill sets are very marketable across the country."

Since 2013, over 120 people have graduated from the five-week Blackfox program, which is funded through state and federal training grants. There is no cost to the veteran and there is no cost to the employer. If graduates don't go



Figure 1: Participants engage in a training and certification class at the Blackfox Training Institute. Certifications are good for up to two years and reflect industry-wide production standards. (Photos courtesy of Blackfox Training Institute.)

to Lockheed, they go to other aerospace companies into communications or work on weather satellites. Two thirds of graduates work at Lockheed Martin's Waterton Canyon EMF, an 85% retention rate. Among them is Johnny Grant, who separated from the Army in 2002 and jumped at the training chance.

"I went to the workforce center in mid-2013 to see what options there were. I went past my allotted time with Uncle Sam to use it at college and the workforce counselors at the Department of Labor told me about the program," said Grant. "It didn't cost me anything as a veteran, as long as I fulfilled the program. Everything is provided by Blackfox and it was all paid for by the workforce center."

Colorado Workforce Centers are aware that those attending such intensive programs are often between jobs and struggle with living expenses during the program.

"They even gave us King Soopers gas cards that we could use for groceries or fuel," said Grant. "When we got short during the curriculum and we needed a little bit of help, we got it."

EMF technician retention rates are improving at Lockheed Martin. Prior to the program's



Figure 2: Key roles of different stakeholders in Blackfox’s training program.

inception, retention was about 50%, but since the program’s 2013 inception, overall retention rate jumped 30% to above 80% and continues to improve.

“Since May of 2015 until now we’ve hired 35 from this partnership and our retention rate rose to 92%,” said Toya. “It’s higher than average—the state customized their recruiting and our job is retaining them. We’ve begun a veteran mentorship at Lockheed Martin with this program to cut the one-year attrition rates. Our veteran mentors meet with the vets in the Blackfox program, explain what it’s like to work on the outside (of the military). He sees them before they’re hired and stays with that group of employees for a year.”

Program graduates are quick to explain the Blackfox Training benefits.

“I was given every tool I needed to succeed. If you’re willing to sacrifice a little to get to school, you can do it,” said Grant. “You get a sense of pride and fulfillment. I could take these certifications and go to Ford or Sony, but it wouldn’t give me nearly the satisfaction of being here contributing to the aerospace mission.”

The program manager says he has gained too. “Being the facilitator of this program is extremely rewarding, to give back to our veteran community,” said Toya. “To further their edu-

cation with our tuition supports a strong and capable workforce and helps veterans integrate back into the civilian workforce.”

Today

In addition to Lockheed Martin, interested Colorado employer partnerships have grown to include many additional major aerospace companies and their supply chain. There is more demand for graduates of this program than there is Federal Funding available to support it.

Tuition for this program is less than \$4k per student and has been funded primarily by Federal and State Grants (i.e., WIOA and VWIP).

Funding is now limited, particularly with veterans as the VWIP is no longer available. Although Blackfox is approved by the VA for use of GI Bill funding, not all veterans qualify. Another challenge for veterans is the cost of transportation, food, and lodging during the five weeks.

Recruiting: We are marketing more to veteran organizations to help recruit veterans. The pool of veterans in the Colorado Department Labor Employment data base is limited. Transitioning veterans need to be aware of the opportunities.

To this point, this program has been funded mostly by State and Federal training grants that have paid for the student’s tuition costs. Utilizing these grants have been useful, but not always dependable or available when needed.

We are looking for foundations and other organizations to sponsor grants for education as well as private funding in order to expand this program. If you are interested in learning more or participating as a sponsor or investor, please [click here](#) to contact Al Dill or call 303-684-0135 at any time. **SMT**



Allen Dill is the president/CEO of Blackfox Training Institute.