

## **Initiative to Ensure a Robust and Sustainable Aerospace/Aviation Workforce in North Carolina**

### **What is the initiative?**

The concerted effort to Ensure a Robust and Sustainable Aerospace/Aviation Workforce in North Carolina is an aviation initiative launched by Governor Bev Perdue at the N.C. Aerospace Executive Forum on May 21, 2010, in New Bern, N.C. Gov. Perdue asked the N.C. Department of Commerce to develop three working groups of aerospace professionals to focus on workforce preparedness, the supplier network, and the recruitment of new aerospace/aviation industry.

What started as the overarching Aerospace Alliance in North Carolina, transitioned to the Governor's task group on aviation workforce development. The process evolved to today's pilot program using a local group of employers in the Piedmont which includes TIMCO, Triumph Group, Purolator-Facet, FedEx, Honda Aircraft, and Atlantic-Aero.

### **Who are our partners?**

Greensboro Partnership  
Local Economic Development Councils  
North Carolina Aerospace Alliance  
North Carolina Community College System  
North Carolina Department of Commerce

North Carolina Military Business Center  
North Carolina Public and Private Colleges  
and Universities  
Piedmont Triad Partnership  
Workforce Development Boards

### **What are the initiative's goals?**

The initiative is chartered to develop an aerospace-ready workforce. Specific tasks include:

- Determining specific aerospace workforce challenges and determining what part of the workforce could meet the industry's needs immediately;
- Responding to aerospace training and workforce gaps, as well as education and curriculum gaps in N.C. Developing a prioritized strategy and determining how the initiative can meet them; and
- Increasing opportunities for students and workers entering the aerospace industry workforce through fellowships, apprenticeships, internships, co-ops, etc.

The initial effort is focused on addressing entry-level openings for skills needed for positions such as machinists, assembly, and sheet metal fabrication. The focus is to help the industry find, train, certify, and retain a new, skilled workforce focusing on the unemployed with a high school degree and/or with 0-4 years experience. The next step is to move into the professional workforce openings.

Since the initiative's inception, the working groups have attained consensus on what the generic job requirements look like, have begun disseminating information about the requirements to educational institutions, and have supported the development of aviation clusters drawing on models in Wichita, Kan., Seattle, Wash. and Dallas/Ft. Worth, Texas.

Our primary goal is to get people started in a life-long career field, not just a new job. Many other industries, in addition to aviation, could apply the initiative's model of developing skills and programs to shorten the skill supply chain in the state.

## **The importance of the aerospace/aviation industry to North Carolina**

North Carolina ranks first in the southeastern United States and ninth overall for manufacturing employment. At the same time, communities throughout the country are facing current or imminent shortages of skilled workers to meet the demands of employers. Typically the aviation workforce enjoys some of the highest paying jobs in industry. Every aviation job created results in 3.6 peripheral jobs in other sectors. North Carolina workers are found to be 36 percent more productive than national workers on average. This aerospace/aviation effort is striving to ensure that unemployed people get back to work, contributing taxes, and off unemployment assistance. Given the existing strong work ethic in N.C., grounded in the tobacco, textile, and furniture industries, technology can help level the playing field by leveraging the younger generations' strong suit.

## **Multiple challenges to attaining the initiative's goals**

Attaining our goals is not without challenges. In order to address these challenges it is important to break down the silos between industry, education, and government. We must come to an agreement on what is important or we will not succeed.

Two challenges relate to training job candidates to meet the minimum requirements in the aerospace industry. Most courses that have been identified today take too long (>15 weeks), put an undue financial hardship on low-income students, do not get enough students attending the courses to meet the needs of industry, and are only offered in certain schools with an inadequate frequency. Rural communities have a hard time attracting teachers and resources. There is an aerospace culture gap where the public does not know the aerospace industry, the professions, careers, or lifestyles that the industry offers.

## **Strategies to address these challenges**

Our primary strategy involves investing in a three-pronged collaboration using industry, academia, and government to break through the fiscal and logistical barriers. Within our industry partnership we realize that it is better to collaborate than compete for talent. Collectively, we have a larger footprint and could draw on networks and resources such as a North Carolina Aviation Industry Hot Jobs website, linked to all industry employers.

We must tell the compelling story of North Carolina's strong aviation and aerospace history from the Wright Brothers through the MX2, Harrier, and V-22 Osprey to the United States Navy, United States Marine Corps fleet maintenance facilities, and the HondaJet.

## **Industry/Employers can:**

- Reach out to the appropriate military personnel separating from service in N.C.;
- Identify and reach out to candidates for the entry-level positions such as high school graduates and people who are unemployed and/or recently laid off from other industries;
- Utilize industry retirees as supervisors, mentors, and instructors; and
- Obtain work commitments from employees in return for stipends/funding similar to military service commitments obtained for education.

### **Academia can:**

- Shorten the initial/entry-level training times in community colleges by providing quick-burst, practical, standardized certification and diploma courses followed up by indigenous corporate training, on-the-job training, and even apprenticeship training in the appropriate disciplines;
- Make the courses available to both urban and rural populations, including offering the courses in multiple locations such as Aerospace/Aviation Centers of Excellence located throughout the state;
- Strengthen partnerships with the industry and become ambassadors for the industry;
- Develop a roadmap from entry level to aircraft and powerplant certification to associate's, bachelor's and master's degrees; and
- Increase the efforts in online and distance learning for workforce needs such as soft skills, tool and material identification and usage, qualification testing, assessment, etc.

### **Government can:**

- Develop a SWAT team comprised of representatives from the local, state and federal services and agencies that are involved with helping the new and expanding businesses grow and flourish – one stop shopping. This can be a critical resource for employers for grants, incentives, tax credits, and other funding. The state could publish a menu of what is available to the employers. SWAT team members could come from the organizations listed below that the initiative works with listed above, including the North Carolina Employment Security Commission and the Golden Leaf Foundation;
- Connect the North Carolina Community College System and Workforce Development Boards with any employer in the state activating the Worker Adjustment and Retraining Notification Act (WARN) so that the Community College System can direct the workforce to appropriate opportunities;
- Make funding through collaborative partnerships available through stipends and tuition reimbursement for students;
- Provide funding or resources (e.g. buses) for transportation from rural areas to the educational institutions;
- Provide continuing support to the pre-K-12 STEM (science, technology, engineering and mathematics) feeder system;
- Provide standardized assessment centers and testing for job- and work-related skills (e.g. Work Keys, work readiness skills training, Career Readiness certification, etc.);
- Reinstitute shop classes in middle, high, and vocational schools. Guilford County Schools has career and technical programs that industry could better partner with and other schools could model;
- Incentivize the further development of schools such as the Andrews Aviation Academy;
- Ensure that small businesses can grow through simplified tax and regulatory policies;
- Create state tax incentives for corporations to provide used equipment and scrap materials to the school system;
- Develop a tax advantage for N.C.'s aerospace/aviation industry to do business with NC suppliers and vendors, which would increase the revenue for operating the state's infrastructure;
- Support economic development efforts around the Piedmont Triad International airport;
- Review tax policies for fixing, maintaining, and selling aircraft; sales tax exemptions; corporate tax structures; energy credits; training credits for new and expanding businesses and incumbent worker training; relocation exemptions; etc.;
- Research requiring Work Keys type testing and an updated resume from those seeking unemployment compensation. Help those who do not have resumes to write them;

- Develop a pre-qualified/tested “unemployed” resume database, allowing companies immediate access to displaced talent;
- Reach out to graduates of technical degree programs in the state who are foreign nationals by connecting them with resources that make them eligible to stay and work in the country post-graduation; and
- Work to ensure that legislators pass legislation that is in line with the goals of developing a comprehensive workforce training policy that furthers – rather than hinders – the efforts of businesses and public organizations in the state working for economic improvement.

### **How could we fund the proposed enhanced efforts?**

Going back to the three-pronged approach, funding could come from a myriad of sources, including federal research matching grants (e.g. Retraining Displaced Workers), training and certifying veterans returning to the workforce, public/private tuition partnerships, tuition reimbursement for continuing education, the Golden Leaf Foundation, Department of Labor (for tuition and equipment; could petition for incumbent worker training), state and local funding, Workforce Development funds, state and federal training grants, reimbursement for continuing education from industry and the state, public education investments for national skills standards/certification, high-growth job training initiatives/public workforce investment system, and Learn and Earn programs.

### **Summary**

North Carolina already has a strong aviation industry but there is much more to do in order to get people into jobs and alleviate poverty in the state. The Initiative to Ensure a Robust and Sustainable Aerospace/Aviation Workforce in North Carolina, in collaboration with a host of partners, is working to enhance the state’s economic health by connecting people with jobs that lead to high-paying careers.

*This handout was prepared by Dave Drugman, Honda Aircraft Company, and distributed at the North Carolina Family Impact Seminar on May 24, 2012.*