



LIGHTWEIGHT INNOVATIONS
FOR TOMORROW

**Kentucky Job
Demand* Bi-Monthly
Update September
and October 2015**

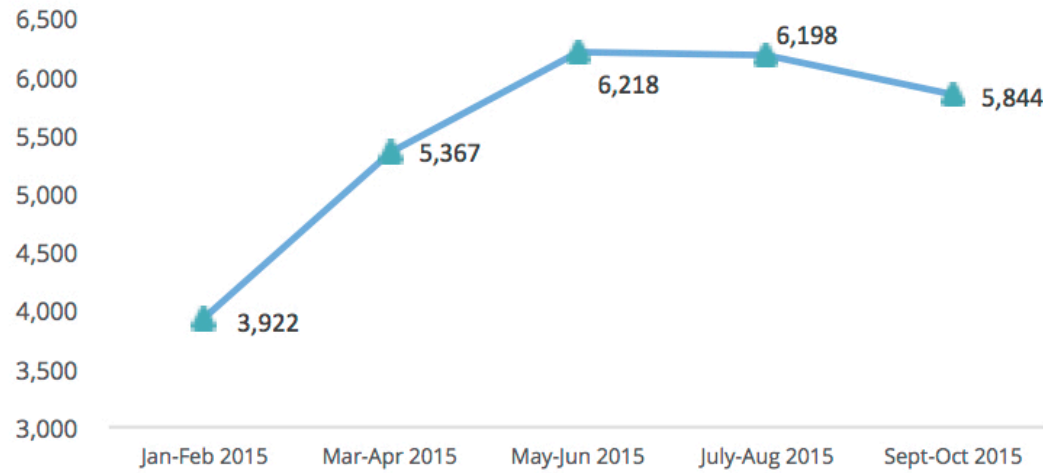
Custom Analysis by WIN



**WORKFORCE
INTELLIGENCE
NETWORK**

for Southeast Michigan

LIFT-related Job Postings (Kentucky January 2015 - October 2015)



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Postings over time

Online job ads for advanced manufacturing jobs related to lightweighting remained high in Kentucky during September and October 2015. Employers posted 5,844 online ads during September-October 2015, 6% above the 2015 bimonthly average of 5,500 postings. Postings for advanced manufacturing occupations related to lightweighting have increased by 50% since January-February 2015.

50%

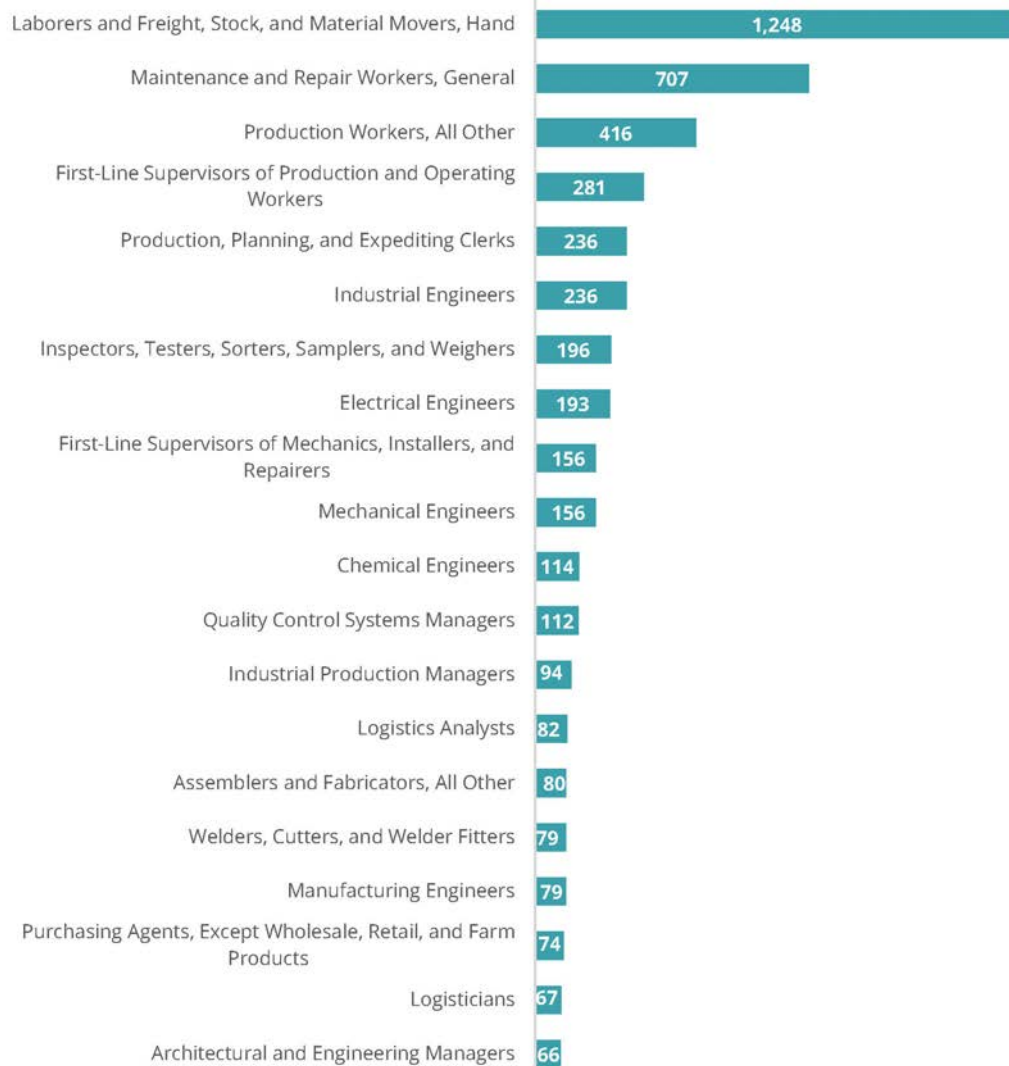
Growth in
lightweighting
job posts

Top Jobs

Of the 5,844 online job ads related to lightweighting posted during September and October 2015, 31% offered salaries over \$50,000 while 41% required at least a Bachelor's degree. The percentage share of postings offering salaries equal to or in excess of \$50,000 has increased 11 percentage points since September-October 2014. Material laborers remained as the most in-demand occupation with over 1,200 online ads posted. The top in-demand jobs do not often change drastically over short periods of time; the top 20 occupations from July-August this year remained as the top 20 for September-October in Kentucky.

Top 20 Lightweighting-related Job Postings

(Kentucky September - October 2015)



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

5.8k

Total KY
lightweighting
job postings

>\$50k

Wage for 31%
of job postings
in KY

41%

Jobs that
require a BA
degree

What counts as lightweighting?

Over 140 individual occupations are related to lightweighting and can be organized into 3 main occupational groups and 10 sub-groups. (1) Skilled trades jobs include machinists, assembly and operations workers, and skilled materials workers. (2) Administration jobs include procurement and purchasing workers, human safety workers, and logistics workers. (3) Engineering & design jobs include electrical and mechanical engineers, chemical engineers & metallurgy workers, designers and drafters, and process engineers and testers.

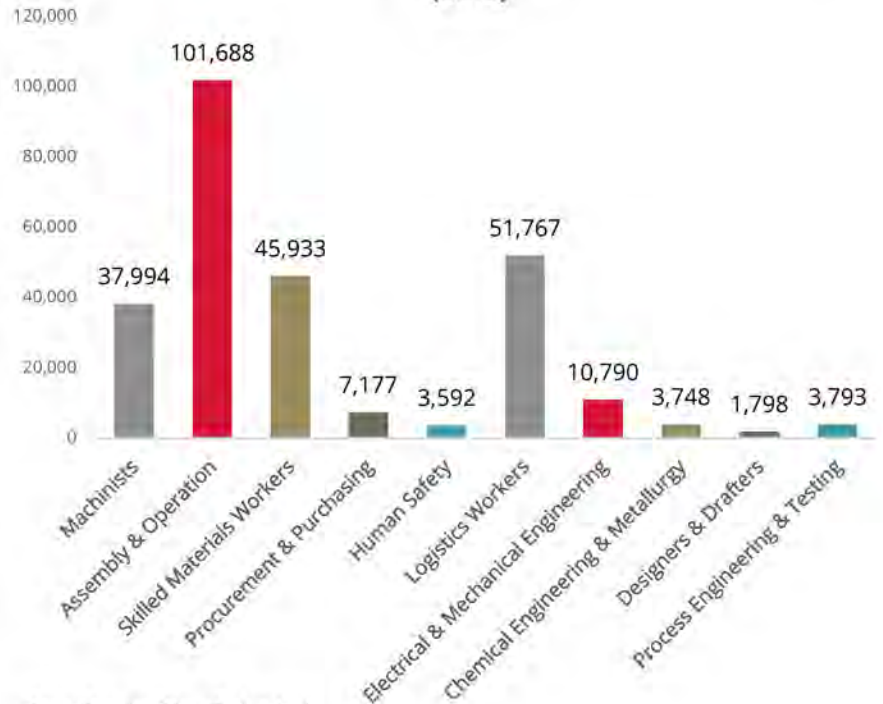
Occupation Sub-Groups Postings and Employment

Analyzing postings and employment side-by-side helps to put postings into context. While job postings in the Electrical & Mechanical Engineering sub-group accounted for 11% of all LIFT-related job postings in Kentucky during September and October 2015, this sub-group only represents 4% of related employment in the state. This discrepancy between demand and employment indicates that this occupation sub-group is in very high demand and will likely drive LIFT-related employment growth in the future if the labor force is available.

On the other hand, some occupation sub-groups display a very small share of postings compared to what is expected from their share of employment. Machinists display this opposite phenomenon, accounting for a relatively large share of Kentucky's LIFT-related employment (14%) but only garnering 4% of related job postings during September and October. This can be an indicator of stable employer demand, or signal that employers do not utilize online postings to recruit this type of worker.

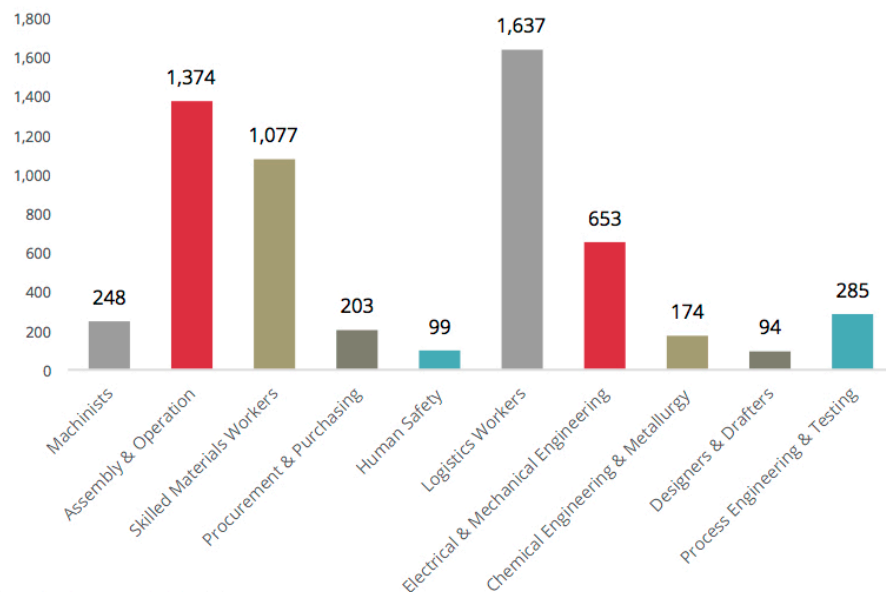
Most other occupation sub-groups have roughly equal shares of employment compared to demand.

Lightweighting Employment in Kentucky by Sub-Group (2015)



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

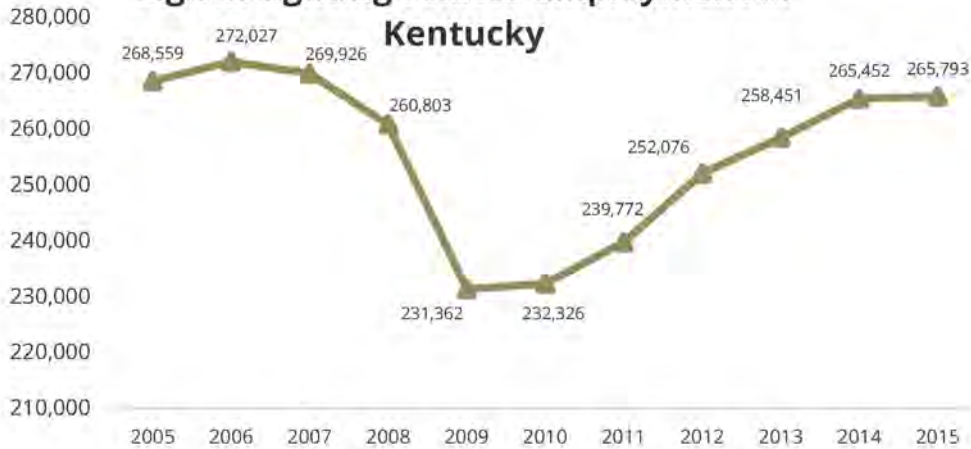
Lightweighting Job Postings in Kentucky by Sub-Group (September & October 2015)



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network



Lightweighting-related Employment in Kentucky



Data: EMSI

Analysis: Workforce Intelligence Network

266K

Lightweighting
employment in
KY

Lightweighting Employment in Kentucky

Lightweighting-related employment in Kentucky remained flat between 2014 and early 2015 estimates. Final 2014 numbers showed employment at 265,452 while the early 2015 number is 265,793. Most lightweighting workers in Kentucky are employed in assembly & operations and logistics positions. With continued high levels of employment, the outlook for these jobs is bright.

Top Procurement & Purchasing Job Postings

(Kentucky September - October 2015)



Data: Burning Glass Technologies

Analysis: Workforce Intelligence Network



Administration Occupations

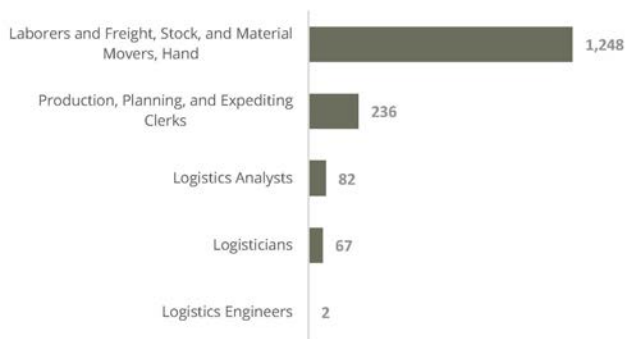
Essential administration jobs related to lightweighting include purchasing materials, ensuring worker safety around machines and with materials, and coordinating and analyzing material and goods movement.

While these jobs are primarily focused on administration, all of the workers in this occupation category must have detailed knowledge of materials, goods movement, and worker safety to help ensure smooth and seamless production.

Kentucky employers posted 1,939 online job postings for occupations within the Administration cluster. The nearly 2,000 ads represented one-third of all LIFT-related postings in the state. Demand for logistics workers, in particular materials laborers, largely drove demand in this cluster representing 64.3% of total postings in Administration.

Top Logistics Worker Job Postings

(Kentucky September - October 2015)

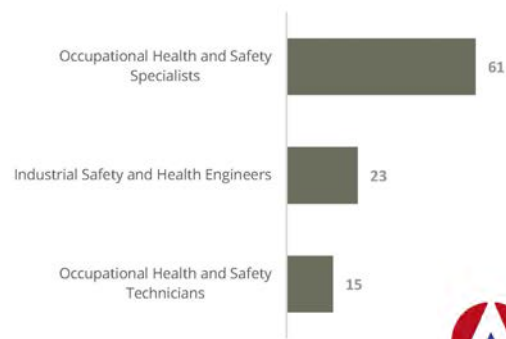


Data: Burning Glass Technologies

Analysis: Workforce Intelligence Network

Top Human Safety Worker Job Postings

(Kentucky September - October 2015)



Data: Burning Glass Technologies

Analysis: Workforce Intelligence Network



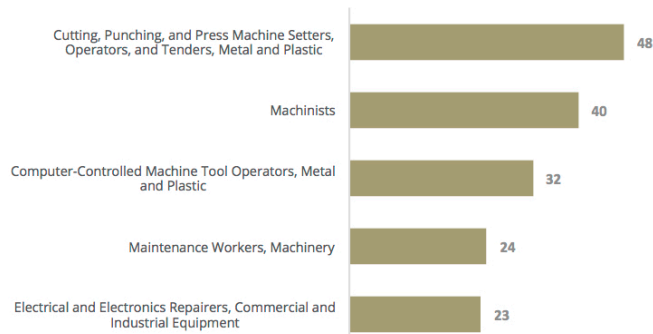
Skilled Trades

Skilled trades workers are the builders and makers of America. They work directly with advanced materials, assemble complicated products, and are experts in welding and machinery. They ensure that designs and plans are carried out to every detail and specification. These workers do everything from welding, to setting and managing computer-numerically-controlled machines, to overseeing manufacturing floors. These skilled workers are essential to lightweighting manufacturing.

The 71 individual occupations within this cluster can be split into three distinct occupation sub-groups; machinists, assembly & operations workers, and skilled materials workers.



Top Machinist Job Postings
(Kentucky September - October 2015)

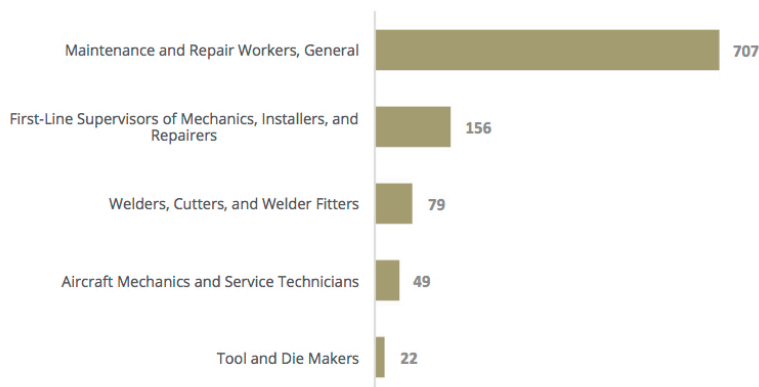


Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Kentucky employers posted 2,699 online ads for occupations in the Skilled Trades cluster, accounting for 44% of all LIFT-related postings in the state. This cluster holds the greatest share of online ads in Kentucky. Maintenance and repair workers, production workers, and supervisors of production workers were main drivers of demand in the Skilled Trades cluster.

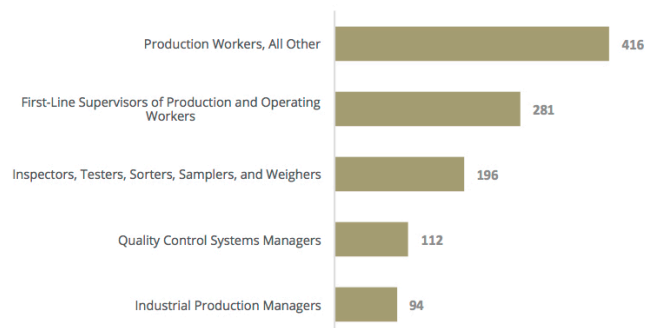


Top Skilled Material Worker Job Postings
(Kentucky September - October 2015)



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Top Assembly & Operations Job Postings
(Kentucky September - October 2015)



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

*Data Note: Demand is defined as online job postings by employers in the state specific for this report.

Engineering & Design

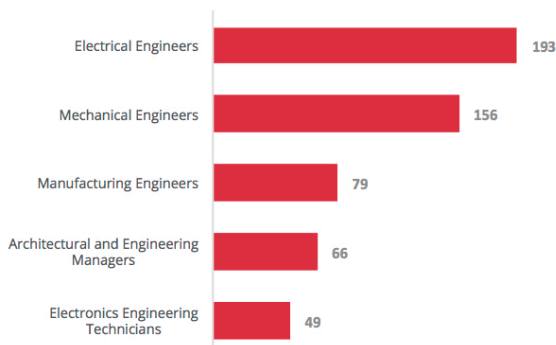
Engineers and industrial designers create the blueprints for all things manufacturing. These workers not only envision the products of the future but also ensure that the products are functional, safe, reliable, and durable. Over 300,000 workers in the LIFT region are employed in engineering and design occupations, representing just over 12% of total lightweighting occupational employment.

The 52 individual occupations within this cluster can be split into four distinct occupation sub-groups; electrical & mechanical engineering, chemical engineering & metallurgy, industrial designers & drafters, and process engineering & testing.



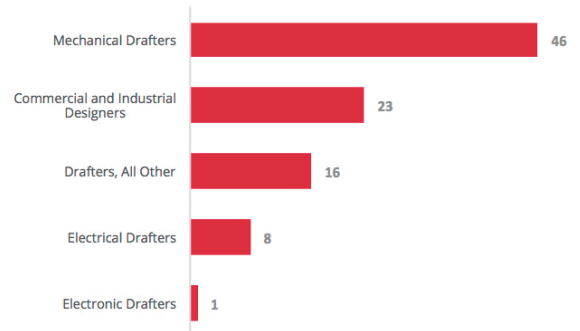
In September and October 2015, employers posted over 1,200 online job postings for Engineering & Design occupations in Kentucky. This cluster accounted for 21% of all LIFT-related employer demand in the state. The most in-demand occupations in this cluster include industrial, chemical, electrical, and mechanical engineers.

**Top Electrical & Mechanical Engineering
Job Postings**
(Kentucky September - October 2015)



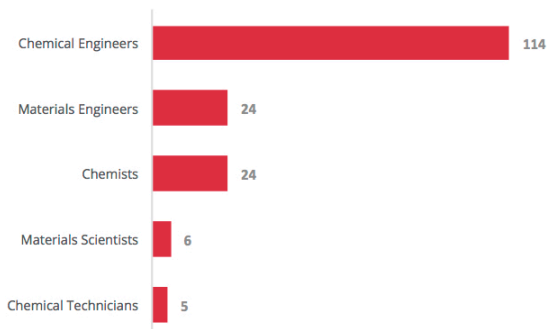
Data: Burning Glass Technologies
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**Top Drafters & Designers
Job Postings**
(Kentucky September - October 2015)



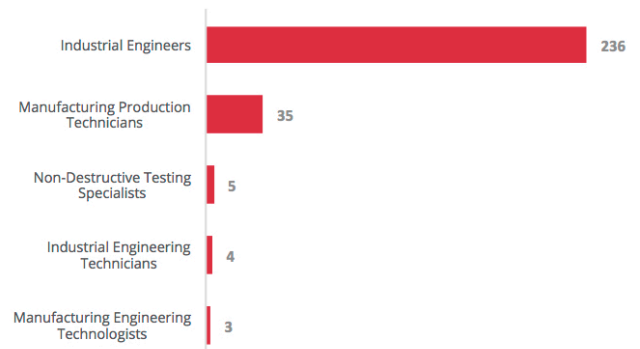
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**Top Chemical Engineering & Metallurgy
Job Postings**
(Kentucky September - October 2015)



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

**Top Process Engineering & Testing
Job Postings**
(Kentucky September - October 2015)



Data: Burning Glass Technologies
Analysis: Workforce Intelligence Network

Lightweight Innovations for Tomorrow (LIFT) is a public-private partnership that will develop and deploy advanced lightweight materials manufacturing technologies and implement education and training programs to prepare the workforce.

Lightweight materials are increasingly important to the competitiveness of transportation manufacturing sectors, including suppliers in the automobile, aircraft, heavy truck, ship, rail, and defense manufacturing industries. Lighter vehicles for the military, industry, and consumers alike, have better performance and use less fuel.



LIGHTWEIGHT INNOVATIONS FOR
TOMORROW

The LIFT region includes 5 states: Michigan, Ohio, Indiana, Kentucky, and Tennessee. Integrative education, training, and workforce development is a core, sustained aspect of the Institute's mission. An educated and skilled workforce is critical to the future of manufacturing. Under the direction of Emily Stover DeRocco, LIFT's Education & Workforce Director, the LIFT Workforce & Education Working Group will design and implement a cohesive strategy to deliver the talent necessary to the long-term health of the U.S. and defense industrial bases.