Composite materials have been introduced into almost every industry in some form or fashion. The wide range of property values attained with composites and the ability to tailor the properties is an advantage. Composite materials also generally have higher strength- and modulus-to-weight ratios than traditional engineering materials. These features can reduce the weight of a system by as much as 20 to 30%.

Since composite materials can be manufactured into almost any shape, they allow great design flexibility and offer reduced parts count for articles. The opportunity to select the constituents, tailor them to obtain the required properties, and then through design make the optimum use of the properties is a situation that makes composites very attractive to many industries.

This commodity has been critical to our aerospace and maritime business units at General Dynamics Mission Systems. Their ease of manufacture, light weight, high strength, low maintenance, decorativeness and functionality have had a significant impact on our business. We have a strong cadre of suppliers that have a long history of providing critical composite technologies on time and with a competitive cost profile. We will continue evolve and develop our supply base in our Composites commodity.

Scotty Miller II
VP, Supply Chain Management

In This Issue

4 Meet the Composites Commodity
5 Buyer Feature
6-7 Learn the NEW Commodities
8 Is Your Company Profile in S360?
9 Get To Know The Team
10-13 Financial Health Transparency for Supplier Relationships
13 Industry Events
14-15 Compliance With DoD Assessment Requirements
16 Open TechScouts
17 The Supplier News and Information Center

About this publication: This is General Dynamics Mission Systems’ Innovation Sourcing Network, open supplier innovation ecosystem monthly newsletter. © 2021 General Dynamics
The Composites commodity team resides in Marion, Virginia. Our procurement scope includes everything from prepreg and film adhesives to honeycomb, raw material (aluminum sheet/coil), machined hardware, bagging materials, paints/chemicals, tooling, services and facilities support. Many of our purchased parts have shelf life, temperature storage requirements and out-time expirations, which require close management. While a large percentage of our work supports government programs, our newest and most rapid growth has been in the commercial aerospace industry for composite radomes. Our team is comprised of nine procurement professionals that closely collaborate with engineering on new design technology and a manager that partners with the line of business and functional leads to drive supplier strategic alignment within our three product lines: radomes, aerostructures and shelters.

Our supply base includes a large volume of small businesses that support our evolving expectations, while meeting our small business goals. Procurement agreements are negotiated, implemented and managed with critical suppliers. These agreements provide competitive results by stabilizing price escalations. Outyear forecasting is utilized to reduce lead times to support our challenging business needs. We have established long-term relationships with our supplying partners; many have been with us for 40+ years. We view them as extensions of our team and expect continual improvement, accountability and most importantly, open/honest communication.

About the Team:
With well over 160 years of combined experience at the Marion site, our Composites buying staff are experts in their field. They can always be relied upon to creatively resolve issues and manage all aspects of supplier engagements. Lynn has managed the Composites commodity team since 2016. She continues to cultivate strong relationships with suppliers and internal stakeholders, many of whom she’s worked with since joining General Dynamics in 2014.

Key Contact:
Lynn Dixon, Composites Commodity Manager: Lynn.Dixon@gd-ms.com

---

A Conversation with Our Buyers
Linda works in Marion, Virginia. She has been with the company for 42 years.

What technologies or capabilities are you seeing most often in your commodity?
Composite materials (prepreg, film adhesive, core and foam) are commonly used in radome production in Marion. Composite materials are used to reduce the weight of the aircraft, which is of utmost importance for efficient flight capabilities (fuel efficiency allows for additional cargo or longer flights). Prepreg and film adhesives are used in the production of high-performance, next-generation composite radomes developed in Marion.

Material is also being developed in a research and development capacity to meet the forecasted upcoming requirements in the industry to support lower loss during signal transmission through the composite radome wall.

What line of business do you support most often?
The Composites commodity supports the Maritime & Strategic Systems line of business out of Marion, Virginia. Although most products are predominately for the defense industry, we do support the commercial aircraft industry, as well. We produce military nose radomes for F15, F16, F18, F35, C130 and several other jets. Marion also produces inflight entertainment radomes for commercial aircraft. They are mounted on top of the plane to provide Wi-Fi capabilities to passengers while in flight.

Outside of radomes, Marion also produces other composite parts such as the AEGIS ship reflector, expandable 20 foot ISO containers and both structural and composite engine parts for commercial and military applications.

What separates a good supplier from a great supplier?
I think one word answers this question: Communication. A great supplier communicates on a regular basis, keeping the buyer informed of any issues, delays or changes in their materials or processes. Establishing a good working rapport with our suppliers is of utmost importance. In my particular commodity, the materials have to be shipped at specific temperatures (frozen) and have specific out-times and shelf life, so constant monitoring is essential. Daily communication is required on these temperature and time sensitive materials, as well as a great deal of planning to support internal production; therefore communication is a top priority.

Key Contact:
Contact Linda at: Linda.Dean@gd-ms.com
### Commodity Categories

#### Operational Services

#### Mechanical Services
- **Products**: Actuating Levers, Antenna Masts, Arms, Bearings, Bellows, Bolts, Brackets, Calibrated parts, Cams, Casings, Castings, Chassis, and Bases, Container, Hardware, Custom Fabric Parts, Custom Packaging, Details, Drives Belts, Drums, Enclosure parts, Eyes, Fan Blades and Rollers, Fasteners, Fastening Parts, Firing Pins, Flat Mechanical Parts, Gaskets, Gears, Glass parts, Grommets, Heat Sinks, Hollding/Positioning Parts, Insulating parts, Jack Sticks, Keys, Kit, Knobs, Labels, Lanyards, Lenses, Links, Machining, Mechanical Gears, Mechanical Hinges, Mechanical Hardware, Metals, Nameplates, Nuts, Operating Control Parts, Ornamental Parts, Pistons, Plastic- Fabricated items, Plastics, Pulleys, Quick Release Plungers & Sildes, Raw Material, Retaining parts, Rivets, Screws, Screen, Sealing Parts, Saddles, and Spools, Shafts, Sheet Metal, Shielding parts, Springs, Tags, and Instruction Cards, Washers, Wheels.

#### Electro-Mechanical Services
- **Products**: Antennas, Audio Equipment, Batteries & chargers, Bells and Buzzers, Circuit Breakers, Circuit boards, Coil Forms, Contract Manufacturing, (Keypad Assemblies, Box Build, CCA), Converters (RF - Up and Down Delay Lines, Flex circuits & Flex Assemblies, FPGA Boards, Fuses, Inductive Devices, Inductors, Isolators - RF LED Limiters - RF Microcircuits, Oscillators (Crystal).

#### Component and Assembly
- **Products**: Bandpass filters, Capacitors, Circuit board Assemblies, Circuit boards, Coil Forms, Contract Manufacturing, (Keypad Assemblies, Box Build, CCA), Converters (RF - Up and Down Delay Lines, Flex circuits & Flex Assemblies, FPGA Boards, Fuses, Inductive Devices, Inductors, Isolators - RF LED Limiters - RF Microcircuits, Oscillators (Crystal).

#### Composites

#### Interconnect
- **Products**: Bandpass filters, Capacitors, Circuit board Assemblies, Circuit boards, Coil Forms, Contract Manufacturing, (Keypad Assemblies, Box Build, CCA), Converters (RF - Up and Down Delay Lines, Flex circuits & Flex Assemblies, FPGA Boards, Fuses, Inductive Devices, Inductors, Isolators - RF LED Limiters - RF Microcircuits, Oscillators (Crystal).

### Business Process MGMT
- **Products**: P-Card Program, Mobile Devices, Amazon Business Office Supplies, Business Cards.

### Travel
- **Products**: Airlines, Car Rental, Ground Services (Airport Parking, Car Services, etc.), Hotel / Lodging Meeting/Events, Sourcing, Support.

### Services
- **Business Cards**: P-Card Program, Mobile Devices, Amazon Business Office Supplies, Business Cards.
We believe diversity, collaboration and inclusion drives innovation. General Dynamics Mission Systems requires a broad base of suppliers that actively and significantly support our business requirements, proposals and breakthrough technologies. In order to positively reflect this innovative supply chain, we introduced Supplier 360 Vendor Portal to support our shared goals and improve supplier relationship management. If you are not familiar, please take a minute to review this new vendor on-boarding process that allows our vendors to register, qualify and maintain their company information.

https://gdmissionsystems.com/about-us/suppliers/s360

We are actively campaigning to achieve 100% registration with our vendor supply base, and you will be contacted if you do business with General Dynamics. Onboarding is easy: all you need is a web browser to activate your account. It should take about 5 minutes to complete. We welcome supplier proactivity! Just ask your General Dynamics Mission Systems’ Supply Chain contact to send you an invite via email as a new supplier through Supplier 360, or email us at S360@gd-ms.com.

Our Supplier 360 support teams can provide assistance should you have any questions during on-boarding or when requesting periodic updates.

Regards,
General Dynamics Mission Systems Supplier Chain Management Team

See the latest information and quick start guides here:
https://gdmissionsystems.com/about-us/suppliers/s360

Thank you for your cooperation. We look forward to building the future together. If you have any questions or concerns, do not hesitate to contact S360@gd-ms.com.

---

Christina Rogers
Program Manager, Subcontracts

Christina works in Taunton, Massachusetts. She has been with General Dynamics Mission Systems for nine years. She has also worked for General Dynamics Electric Boat for five years and GDIT for four years, for a total of 17 years in the General Dynamics family.

What led you to a career in SCM?
Happenstance? When I graduated with a degree in Classics (Latin), as one can imagine, the job offers weren’t necessarily pouring in. I applied for a position at Electric Boat as an administrator in the Supply Chain organization, with the expectation of being someone’s secretary. I quickly learned that administrator had a different meaning in the industry and was assigned to Material Control. I became captivated with learning all I could of the supply chain process. I have spent most of my career in supply chain, other than my time at GDIT, and now I’m back home.

What has been your most rewarding experience at General Dynamics Mission Systems?
Without sounding too cliché, majority of my experiences have been rewarding. Whether positive or negative experience, each is a rewarding learning experience.

In your opinion, why are relationships with suppliers so important to the SCM mission?
The better we know our suppliers and their capabilities, the more likely we are to be able to enter into strategic relationships that will pave a path for continued success and growth.

What would people never guess that you do in your role?
Sometimes I must be the bad guy. When process gets lost in the excitement, I have to step in to gently remind folks that while what they are trying to accomplish can be done, it needs to be worked through Supply Chain Management to ensure we are following internal processes and adhering to Federal Acquisition Regulations.

How do you contribute to achieving an integrated supply chain?
You could say that I am a link between the program lines of businesses and our supply base. Whether supporting a proposal or executing a contract, Supply Chain Management works very closely with all functional organizations to put General Dynamics in the best position to win and succeed.

What motivates you?
Knowing that the products and technologies General Dynamics delivers are supporting our troops and defending our country.

How do you balance your career and personal life?
With two active boys, there isn’t any other option. I try to keep set work hours, with nights and weekends dedicated to myself and my family. Outside of work, I am very involved in youth sports and enjoy coaching and watch my kids play.

A perfect day would be?
Hitting the slopes with my boys, followed by a book and wine by the fire.
Since 2018 we have been telling you about our vision for a proactive risk management program (PRMP) that includes our partnership with RapidRatings and riskmethods. Today we want to share the current results of that initiative and our excitement to kick-off 2021’s onboarding. For a refresher on our past announcements, check out the previous Innovation Sourcing Network (ISN) articles: October 2018 Page 4, September/October 2019 Page 14.

General Dynamics Mission Systems partnership with RapidRatings and riskmethods on a PRMP for our supply base to identify and reduce supply chain vulnerabilities is proving successful. Look at the graphic below to understand the enhanced and detailed level of information the third-party tools provide and why we are committed to continue on this path.

In 2020, COVID-19 further emphasized the need to understand the financial health of our suppliers and the long-term effects of this unprecedented event on our supply chain. For example, through the PRMP we monitored the financial health of the industry to understand whether our suppliers were impacted better, worse, or the same as others (see Chart 1) and how they are predicted to recover (see Chart 2). These powerful analytics to evaluate financial health on a standardized basis allows General Dynamics Mission Systems to not only prepare for potential risk, but prepare you, our suppliers, for forecasted industry trends and possible outcomes. This data, and the other information available to us through the tools and the PRMP, provides our Supply Chain teams the transparency needed for honest dialogue with you regarding risk, sustainability and mitigation opportunities. It is also why whether you are an existing supplier or emerging one, your participation in our PRMP is critical to our everyday operations. That is why we require participation from all of our suppliers. We know this program works and provides benefits across the board for us, our customers and our suppliers.

### Chart 1:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Very Low Risk</th>
<th>Low Risk</th>
<th>Medium Risk</th>
<th>High Risk</th>
<th>Very High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace and Defense</td>
<td>3%</td>
<td>18%</td>
<td>50%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Builders and Building Materials</td>
<td>0%</td>
<td>0%</td>
<td>35%</td>
<td>40%</td>
<td>20%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>0%</td>
<td>5%</td>
<td>53%</td>
<td>41%</td>
<td>0%</td>
</tr>
<tr>
<td>Communications Technology</td>
<td>0%</td>
<td>15%</td>
<td>30%</td>
<td>37%</td>
<td>19%</td>
</tr>
<tr>
<td>Electronics and Semiconductors</td>
<td>1%</td>
<td>0%</td>
<td>33%</td>
<td>36%</td>
<td>22%</td>
</tr>
<tr>
<td>Metals and Fabrication</td>
<td>0%</td>
<td>21%</td>
<td>13%</td>
<td>50%</td>
<td>17%</td>
</tr>
<tr>
<td>Transportation</td>
<td>5%</td>
<td>25%</td>
<td>20%</td>
<td>5%</td>
<td>37%</td>
</tr>
<tr>
<td>Computer Services &amp; Technology</td>
<td>0%</td>
<td>24%</td>
<td>27%</td>
<td>32%</td>
<td>16%</td>
</tr>
<tr>
<td>Consumer Products &amp; Services</td>
<td>0%</td>
<td>12%</td>
<td>42%</td>
<td>33%</td>
<td>12%</td>
</tr>
</tbody>
</table>

### Chart 2:

![Financial Health Transparency](image)

**General Dynamics Mission Systems’ Suppliers Simulated Financial Risk Scores**

- 35.00% Very Low Risk
- 35.35% Low Risk
- 29.65% Medium Risk
- 0.88% High Risk
- 0.39% Very High Risk

**What Do You Get Out Of It?**

General Dynamics Mission Systems is not the only one who benefits from the PRMP: so do you. Membership in the Financial Health Report (FHR) Network allows you an avenue to securely share your financial rating with General Dynamics Mission Systems while also providing an opportunity to:

- Gain competitive insights on your company’s financial performance.
  - View your own FHR after submitting financials through the secure FHR Network
  - View financial ratio benchmarks compared to peer companies

- Share financial health through the FHR Network to win more business.
  - Demonstrate your strength as a stable, trusted partner by sharing your FHR
Bringing Financial Health Transparency to Supplier Relationships
Supply Chain Risk Management Program

From RapidRatings
- RapidRatings will support your participation through the following steps:
  - Signing up to the FHR Network and navigating the platform
  - Submitting your financial statements
  - Reviewing how to view your FHR Report
  - Reviewing how to share your FHR Report with General Dynamics Mission Systems and other clients/prospects of your choosing.

We look forward to partnering with you to further strengthen our proactive risk management program that benefits all of us. In the upcoming weeks, you will be hearing from General Dynamics Mission Systems and the RapidRatings teams as we kickoff the 2021 onboarding. Together we will view the data with a different lens to ensure that our supply base is financially strong and secure. We need your support to ensure we collectively reduce all potential vulnerabilities. The stakes are high, but by proactively working together we will successfully deliver world-class products and solutions to all those we serve around the globe.

Industry Events Supply Chain Management
SCM Events 2021

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
<th>LOCATION</th>
<th>SCM ATTENDEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 24-26</td>
<td>AFA Air Warfare Symposium &amp; Technology Expo</td>
<td>Virtual</td>
<td>Brian Slaughter</td>
</tr>
<tr>
<td>March 16-18</td>
<td>AUSA Global Force Next</td>
<td>Virtual</td>
<td>Brian Slaughter</td>
</tr>
<tr>
<td>April 19-23</td>
<td>Integrated Communications Navigation &amp; Surveillance (ICNS)</td>
<td>Virtual</td>
<td>Brian Slaughter</td>
</tr>
</tbody>
</table>

From General Dynamics Mission Systems

- **Outreach**
  - We will be hosting information sessions with RapidRatings and our suppliers to help answer any initial questions before outreach letters are sent out.
  - Outreach email sent to supplier from RapidRatings and General Dynamics Mission Systems
  - What to look for in your emails
    - Sender will be supplychainrisk@fhr.gd-ms.com
    - General Dynamics Mission Systems team's email will be CC'd SupplyChainRisk@gd-ms.com
  - RapidRatings support will be CC'd fhrnetworksupport@rapidratings.com

- **White Glove Service**
  - A member from the General Dynamics Mission Systems' Supply Chain Risk team will follow up with you to see if you received the email and if you have any questions.
  - We will support you throughout the onboarding process.

- **Post-Onboarding**
  - General Dynamics Mission Systems will work with you to identify and address financial risk to proactively assess expected supplier performance ratings.
  - We will continue to support you throughout the process.

What to Expect (the Fine Print)

Control how and when your FHR is shared and when you’re visible to others on the network
Become discoverable when companies are searching for new suppliers
- Access financial health reports on suppliers and vendors to protect your brand.
- Access public company FHRs for your own suppliers
- Invite private suppliers to join the FHR Network and share their rating
On Nov. 30, 2020, an interim rule became effective to amend the Defense Federal Acquisition Regulation Supplement (DFARS). This interim rule will implement the following requirements for verifying a contractor’s compliance with cybersecurity requirements in accordance with DFARS 252.204-7012 and to enhance the protection of CUI within the Department of Defense (DoD) supply chain:

1. DoD Assessment Methodology; and
2. Cybersecurity Maturity Model Certification (CMMC) framework.

Three new regulations will further define contractor obligations to protect DoD CUI in addition to DFARS 252.204-7012. The interim rule adds the following new DFARS clauses:

- DFARS 252.204-7019, Notice of NIST SP 800-171 DoD Assessment Requirements
- DFARS 252.204-7020, NIST SP 800-171 DoD Assessment Requirements
- DFARS 252.204-7021, Cybersecurity Maturity Model Certification Requirements

DFARS 252.204-7021 clause formally begins DoD’s adoption of the Cybersecurity Maturity Model Certification (CMMC). CMMC requirements will be implemented on a contract by contract basis incrementally over the next five years. DFARS 252.204-7019 and DFARS 252.204-7020 require that all contractors maintain a current DoD assessment score (less than three years old, using the Defense Contract Management Agency (DCMA) assessment methodology in the DoD Supplier Performance Risk System (SPRS), and that prior to awarding contracts/subcontracts involving CUI, the contracting organization must confirm that a current DoD assessment score is in SPRS. To the extent these clauses are included in new General Dynamics prime contracts, these obligations will flow to all organizations in the supply chain who manage CUI with their subcontractors.

DFARS 252.204-7020 and DFARS 252.204-7021 are required flow-downs in all subcontracts, purchase orders, or other contractual instruments, including for commercial items. They exclude procurements of solely commercial-off-the-shelf (COTS) items and procurements at or below the micro-purchase threshold (currently $10,000).

The DoD has indicated that it will take approximately 30 days to post a basic self-assessment in SPRS, if you choose to send your basic assessment to DoD for posting in SPRS in accordance with the procedures in DFARS 252.204-7020. Alternatively, suppliers may post their own basic assessment scores in SPRS using the link on next page. After November 30, 2020, we will not be able to issue you an award under a DoD Contract containing these requirements, unless you have a DoD assessment posted in SPRS. It is imperative that you take action immediately to avoid disruptions to future business.

This article was originally printed in our November/December issue. It is being reprinted for your awareness.

Requested Actions:
To avoid disruptions to future business, suppliers should begin taking the following actions immediately:

- **Ensure that you have a current DoD Assessment score in SPRS (for all CAGE codes covered by your System Security Plan (SSP)).** Information regarding SPRS is available at the following link: [https://www.sprs.csd.disa.mil/](https://www.sprs.csd.disa.mil/). If you do not have an account in SPRS, register at [https://piee.et.mil/piee-landing/](https://piee.et.mil/piee-landing/) and include the role of SPRS.
  - At a minimum, determine your score through the basic assessment (self-assessment), and submit it to DoD in accordance with DFARS 252.204-7020. (Reference: Annex B within NIST SP 800-171 DoD Assessment Methodology, V1.2.1)
  - If your organization’s NIST SP 800-171 implementation was already assessed by the DCMA (DIBCAC medium or high assessment) and you have received your score, you should have satisfied this requirement. However, suppliers should confirm that their medium or high assessment scores are posted in SPRS.
  - Consider requesting DCMA perform a DIBCAC Medium or High confidence assessment. The external assessment will not only document your score in SPRS, but it will also help your organization prepare for CMMC (third-party) assessment required in DFARS 252.204-7021.

- **Address the Additional CMMC Practices and Processes Now**
  - We anticipate future guidance from the DoD regarding the CMMC process with the CMMC accreditation body.
  - To the extent a new solicitation or contract includes CMMC requirements per DFARS 252.204-7021, you must have an assessment score of level 3 or greater to receive, store, create, or transmit CUI.
  - To achieve CMMC Level 3 certification by a CMMC Third-Party Assessor Organization (C3PAO), organizations need to demonstrate implementation of all 130 Level 3 practices (NIST 800-171’s 110-20), as well as the three processes associated with Maturity Level (ML) 3 (inclusive of ML2). Plans of Action and Milestones (POAMs) will not satisfy the certification requirement.
  - Additional information regarding CMMC is available at the following:
    - [https://www.cmmcab.org/](https://www.cmmcab.org/)

- **Provide Status to General Dynamics Mission Systems**
  - In order for General Dynamics Mission Systems to assess risk and preparedness for the November 30 effective date of the new rules, we must receive the status of our applicable suppliers. We will be sending a separate request for you to complete the representation and certification.

As we anticipate seeing the DoD CMMC requirements in RFIs/RFPs/Contracts in late-2020/early-2021, addressing outstanding actions now to become fully compliant with all security requirements is the best strategy for staying ahead of the curve and minimizing potential supply chain disruptions. Thank you in advance for your cooperation and we will continue to update you as implementation of these regulations evolve.

Additional Resources:
- The [DIB SCC CyberAssist site](https://www.dibscc.org/cyberassist) provides resources to assist Defense Industrial Base (DIB) companies and suppliers of varying sizes with their implementation of cyber protections, accountability for their supply chain, and awareness of cyber risk and regulations, including recently added CMMC resources.
- [DoD Procurement Toolbox](https://www.acq.osd.mil/policy/procurement/toolbox/cybersecurity.html)
- [DoD CUI](https://www.acq.osd.mil/dpap/dp/cui)
The Supplier News and Information Center is now available on the General Dynamics Mission Systems website www.gdmissionsystems.com

General Dynamics Mission Systems has established the Supplier News and Information Center on the Supplier page of our website to keep our supply chain partners informed with critical information relating to our operating status and the adjustments we are making in response to the COVID-19 outbreak.

Search under About and Suppliers to click on the COVID-19 Information for Suppliers bottom.