

November 30, 2020

The Honorable James Inhofe
Chair, Senate Armed Services Committee
228 Russell Senate Office Building
Washington, DC 20510

The Honorable Jack Reed
Ranking Member, Senate Armed Services Committee
228 Russell Senate Office Building
Washington, DC 20510

The Honorable Adam Smith
Chair, House Armed Services Committee
2216 Rayburn House Office Building
Washington, DC 20515

The Honorable Mac Thornberry
Ranking Member, House Armed Services Committee
2216 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Inhofe, Chairman Smith, Ranking Member Reed, and Ranking Member Thornberry:

The undersigned organizations, representing the full value chain of the forestry and forest products industry, are writing to respectfully request inclusion of the innovative wood products report language in the Fiscal Year 2021 National Defense Authorization Act (NDAA). Working forests and forest products support 2.5 million jobs as well as \$288 billion in sales and \$106 billion in payroll in the U.S., forming a critical economic driver of rural economies across the country. Wood products offer unique advantages in construction-time, safety, health, and environmental impact, that can provide the military with a larger range of options to address critical housing issues, mission readiness, sustainability, and carbon sequestration. Markets for forest products promote and maintain sustainably managed forests, which clean the air and water while sequestering carbon, which is then stored in wood components.¹

The innovative wood product report language included in the Spanberger/Scott Amendment in the House Fiscal Year NDAA requests the Secretary of Defense, in collaboration with the Secretary of Agriculture, review the potential to incorporate innovative wood products in constructing or renovating facilities owned or managed by the Department of Defense (DoD) and provide a report to Congress. This report will be an important contribution to the growing understanding of the role of wood products in today's modern military construction, especially given new building and resilience technologies that have the potential to support DoD planning and adaptation to changing climate conditions.

DoD identified climate change as a serious national security issue beginning with the 2014 DoD Climate Change Adaptation Roadmap. Since then, DoD has been carrying out resilience work and risk assessments to help safeguard the U.S. economy, infrastructure, environment, and

¹ National Alliance of Forest Owners. Working Forests: Maximizing the Potential of a Natural Climate Solution. <https://nafoalliance.org/clean-air/>

natural resources by providing for the continuity of DoD operations, services, and programs. This includes the built and natural environment and the acquisition and supply chain.

Congress has already supported this ongoing effort in a bipartisan fashion in prior NDAA's, as follows:

- **2019 (FY20 NDAA enacted Dec 20, 2019)**
Military Installation Resilience Plans: Directs DoD to incorporate military installation resilience into its installations' Master Plans, specifically to assess vulnerabilities to installations and surrounding communities, identify missions that would be affected by those vulnerabilities, and propose projects to address them. (Sec. 2801a)
Resilient Construction Requirements: Includes a requirement for Improved Building Codes, called Unified Facilities Criteria in DoD, to promote resilience in new construction. (Sec. 2804)
- **2018 (FY19 NDAA enacted August 13, 2018)**
Incorporation of changing environmental conditions into Unified Facilities Criteria (i.e. military construction design requirements). (Sec. 2805)
Inclusion of energy and climate considerations into installation master plans (which govern how a base is laid out and where new construction will occur). (Sec. 2805)
A formal definition of military installation resilience that includes resilience to changes in environmental conditions. (Sec. 2805)
Authority to expend Readiness and Environmental Protection Initiative funds to protect military installation resilience. (Sec. 312i)
Authority to spend economic adjustment funds on military installation resilience. (Sec. 2805)

In 2019, the *Report on Effects of a Changing Climate to the Department of Defense* revealed that about two thirds of the 79 military installations surveyed were already facing climate change-related risks. However, a June 2020 report by the U.S. Government Accountability Office found that DoD has not routinely assessed climate-related risks faced by its contractors as part of its acquisition and supply processes. Understanding the opportunity presented by new building technologies, such as wood, to address risks faced by DoD is mission critical.

Innovative mass timber, i.e., timber products engineered for use in the construction of large structures, are safe, effective and environmentally sound products that are used in buildings all over the world to great success. Base hotels built from innovative wood products, including mass timber, have been successfully completed at Redstone Arsenal, Joint Base Lewis-McChord, and Fort Drum. Before construction of these hotels were allowed, the materials passed rigorous blast testing for Anti-Terrorism and Force Protection (ATFP) approval.² Mass timber has also been accepted into the military's Unified Facilities Guide Specification in 2016³ and the International Code Council (ICC) has approved changes to the 2021 editions of the *International Building Code (IBC)* and *International Fire Code*, allowing for mass timber buildings up to 18 stories.⁴ Mass timber also allows for construction efficiencies: For

²Wood Innovation Network. Candlewood Suites Hotel, Joint Base Lewis McChord. <https://www.woodworksinnovationnetwork.org/projects/204>

³ American Wood Council. 2021 IBC Approved Code Change Resources <https://awc.org/tallmasstimber>

⁴ UFGS-06 17 19 (November 2016). <https://www.wbdg.org/FFC/DOD/UFGS/UFGS%2006%2017%2019.pdf>

example, the hotel constructed at Joint Base Lewis-McChord was completed 37 percent faster and with 40 percent fewer man hours than other hotels of the same scope and scale.

In addition to the potential uses of mass timber in military construction projects, other domestic wood products are readily available for various military applications. Cellulose nanomaterials have significant military applications in everything from ballistic glass to light scattering paint coatings. Cellulosic nanomaterials can also reduce CO₂ emissions in non-wood building materials by as much as 20 percent. Another example is the utilization of imported tropical hardwoods for military trailers used to move various types of equipment (tanks, ammunition, etc.) instead of domestic hardwoods, which raises concerns about foreign supply chains.

The forest products industry strongly supports the Spanberger/Scott language in the Fiscal Year 2021 National Defense Authorization Act (NDAA) and urges the both the Committee and the DoD to increase the study, understanding and utilization of sustainable and innovative materials to support the military's crucial and evolving mission. Thank you in advance for your consideration.

Sincerely,

American Forest Foundation (AFF)
American Wood Council (AWC)
Composite Panel Association (CPA)
Forest Resources Association
Hardwood Federation
Idaho Forest Group
National Alliance of Forest Owners (NAFO)
Southeastern
Southeast Lumber and Manufacturers Association (SLMA)
Weyerhaeuser
Wood Machinery Manufacturers of America
WoodWorks