

NPS AM Theses

Below is a list of research and scholarly work completed by NPS students from across a range of disciplines. All work can be found via the Naval Postgraduate School's [Dudley Knox Library](#). Theses and dissertations are updated weekly.

[Analysis of the potential impact of additive manufacturing on Army logistics](#)

Zimmerman, Brock A.; Allen, Ellis E., III (Monterey, California: Naval Postgraduate School, 2013-12) This study examines additive manufacturing and describes the potential impact it could have on Army logistics, specifically contingency resupply operations.

[Achieving ship's mission flexibility through designing, printing and operating unmanned systems with additive manufacturing and delayed differentiation](#)

Sin, Mong Lin (Monterey, California: Naval Postgraduate School, 2016-09) The design, print and operate (DPO) concept of operations (CONOPS) is proposed in this thesis as a new means of equipping ships with the appropriate capabilities.

[Additive manufacturing: preparing for the reality of science fiction](#)

Windle, William A. (Monterey, California: Naval Postgraduate School, 2015-09) A structured focus comparison of three emerging technologies, unmanned aerial systems, autonomous vehicles, and additive manufacturing, revealed characteristics of emerging technologies—such as a low price point for market entry and rapid evolution—that tend to surprise policymakers.

[Navy additive manufacturing: adding parts, subtracting steps](#)

Cunningham, Victor; Schrader, Christopher A.; Young, James (Trae) (Monterey, California: Naval Postgraduate School, 2015-06) This study examines additive manufacturing (AM) and describes its potential impact on the Navy's Supply Chain Management processes.

[Additive manufacturing in the Marine Corps](#)

McLearn, Luke J. (Monterey, California: Naval Postgraduate School, 2015-06) This thesis answers the question of how additive manufacturing can improve the effectiveness of Marine Corps logistics.

[Cost reduction through the use of additive manufacturing \(3D printing\) and collaborative product life cycle management technologies to enhance the Navy's maintenance programs](#)

Kenney, Michael E. (Monterey, California: Naval Postgraduate School, 2013-09) This thesis examines the potential cost benefits of incorporating additive manufacturing (AM), commonly known as 3D printing, and collaborative product life cycle management (CPLM) software into these maintenance activities.

[An analysis of item identification for additive manufacturing \(3-D printing\) within the Naval supply chain](#)

Morgan, Jason A.; Prentiss, Jacob M. (Monterey, California: Naval Postgraduate School, 2014-12) This project's goal is to provide decision support criteria by identifying influential factors that determine the applicability of 3-D printing alternatives.

[Navy additive manufacturing: policy analysis for future DLA material support](#)

O'Connor, Christopher (Monterey, California: Naval Postgraduate School, 2014-12) This project is a study of technology adoption theories and their application to Additive Manufacturing (AM) in the Navy and wider Department of Defense. It examines AM technology modalities and how they are used throughout the Navy. It also looks at the obstacles to wider implementation in the Navy and determines ways the Navy can overcome those and other considerations. Finally, it shows how the Defense Logistics Agency can support the AM through existing customer support programs.

[An analysis of additive manufacturing production problems and solutions](#)

Muniz, Benjamin G.; Peters, Kevin M. (Monterey, California: Naval Postgraduate School, 2016-12) The purpose of this study is to examine challenges and opportunities facing industry and the Department of Defense (DOD) in utilizing additive manufacturing (AM).

[Additive manufacturing: an analysis of intellectual property rights on Navy acquisition](#)

Paben, Carrie; Stephens, Wendell K., Sr. (Monterey, California: Naval Postgraduate School, 2015-12) The intent of this project was to advance previous research into the benefits and challenges of implementing additive manufacturing (AM) in the Navy. Specifically, this project focused on intellectual property (IP) rights, government rights, and the potential impact current laws and regulations may have on AM implementation into the Navy.

[Feedback is welcome!](#) Please let us know what you think.