

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. United Technologies Corporation Pratt and Whitney</p> <p>2. 400 Main Street, M/S 124-26 East Hartford, Connecticut 06108</p>	<p>In accordance with the letter dated September 13, 2013,</p> <p>3. License number SMB-151 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date January 31, 2021</p> <hr/> <p>5. Docket No. 040-00791 Reference No.</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Natural Thorium</p>	<p>7. Chemical and/or physical form</p> <p>A. Solid Thorium Oxide not exceeding 4% dispersed in Nickel</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 910 kilograms</p>
<p>9. Authorized use:</p> <p>A. Research and development and fabrication of aircraft engine components.</p>		

CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located at 400 Main Street, East Hartford, Connecticut, and Aircraft Road, Middletown, Connecticut.
11. Licensed material shall be used by, or under the supervision of, Dennis M. Kraemer, or United Technologies' Safety Engineers who have successfully completed the training requirements described in the letter dated August 5, 2005, and are approved by the Radiation Safety Officer.
12. The Radiation Safety Officer for this license is Dennis M. Kraemer.
13. The licensee is not required to file the reports described in 10 CFR 40.64(a), (b), or (c) for thorium contained in nickel-thorium alloys if the thorium content of the alloys does not exceed 4 percent by weight.
14. The licensee is authorized to transport licensed material in accordance with the provisions of

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
SMB-151Docket or Reference Number
040-00791

Amendment No. 21

10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

15. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Letter dated August 5, 2005 (ML052210160)
 - B. Letter dated August 9, 2010 (ML102350270)
 - C. Letter dated July 18, 2012 (ML12213A111)



For the U.S. Nuclear Regulatory Commission

Date October 2, 2013

By

Original signed by Elizabeth Ullrich

Elizabeth Ullrich
Commercial and R&D Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406