1. GRANTEE: (See individual authorization letter)

2. PURPOSE AND LIMITATION:
   a. This special permit authorizes the transportation in commerce of certain DOT Specification 2Q containers containing hazardous materials identified in paragraph 6. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
   
   b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
   
   c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.


4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.304a(a) in that a DOT Specification 2Q container is not listed as authorized packaging; Part 172, subpart C unless transported by air; Part 172, subpart E unless transported by air; Part 172, subpart F; Part 174; and Part 177.

5. BASIS: This special permit is based on the application of Honeywell International, Inc. dated November 10, 2015, submitted in accordance with § 107.105 and the public proceeding thereon.
6. **HAZARDOUS MATERIALS (49 CFR § 172.101):**

<table>
<thead>
<tr>
<th>Hazardous Materials Description</th>
<th>Hazard Class/Division</th>
<th>Identification Number</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed gas, flammable, n.o.s./Tetrafluoroethane and Dimethylether mixtures (each chemical must make up at least 30% but no more than 70% of the contents)</td>
<td>2.1</td>
<td>UN1954</td>
<td>N/A</td>
</tr>
<tr>
<td>Compressed gas, flammable, n.o.s./Dimethyl ether mixture (95% dimethyl ether, 3% isobutane, 2% propane)</td>
<td>2.1</td>
<td>UN1954</td>
<td>N/A</td>
</tr>
<tr>
<td>1,1-Difluoroethane or Refrigerant gas R 152a</td>
<td>2.1</td>
<td>UN1030</td>
<td>N/A</td>
</tr>
<tr>
<td>Compressed gas, n.o.s. (contains argon, carbon monoxide)</td>
<td>2.2</td>
<td>UN1956</td>
<td>N/A</td>
</tr>
<tr>
<td>Nitrogen, compressed</td>
<td>2.2</td>
<td>UN1066</td>
<td>N/A</td>
</tr>
<tr>
<td>Liquefied gas, n.o.s. (Refrigerant gas HFO-1234ze)</td>
<td>2.2</td>
<td>UN3163</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **PACKAGING** - Prescribed packagings are DOT Specification 2Q containers not exceeding 667 ml capacity, except for packagings containing 95% dimethyl ether which shall not exceed 270 ml. Containers must be shipped as follows:

   (1) The maximum permitted filling density is 79 percent. In addition, the liquid portion of the gas must not completely fill the container at any temperature up to and including 130°F.

   (2) The pressure in the container must not exceed 65 psig at 70°F and 180 psig at 130°F.
(3) The container must be capable of withstanding without bursting a pressure of one and one-half times the equilibrium pressure of the content at 130°F.

(4) The containers must be packed in strong outside packagings.

(5) Each package may not exceed 66 pounds gross weight.

b. TESTING: Each completed container filled for shipment must have been heated until the pressure in the container is equivalent to the equilibrium pressure of the content at 130°F without evidence of leakage, distortion, or other defect.

c. OPERATIONAL CONTROLS: Shipments are not subject to the shipping paper requirements of subpart C of Part 172 and the labeling requirements of subpart E of Part 172 unless offered for transportation by aircraft. The CARGO AIRCRAFT ONLY label must be printed or affixed to a surface (other than the bottom) of each package in proximity to the required marking and labeling on each package intended for transportation by aircraft. Shipments are not subject to the placarding requirements of subpart F of Part 172, to Part 174 and to Part 177.

d. MARKING: All outer packages must be marked in accordance with the marking requirements of subpart D of Part 172 and "DOT-SP 11516".

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. Transportation of Division 2.1 (flammable gases) are not authorized aboard cargo vessel or aircraft unless specifically authorized in the Hazardous Materials Table (§ 172.101).
9. **MODES OF TRANSPORTATION AUTHORIZED:** Motor vehicle, rail freight, cargo vessel, and cargo aircraft only.

10. **MODAL REQUIREMENTS:** A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.

11. **COMPLIANCE:** Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

   - All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
   - Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
   - Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. **REPORTING REQUIREMENTS:** Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous
materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover
Associate Administrator for Hazardous Materials Safety


Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: BMoore/SG/kah