1. **GRANTEE:** Teledyne Brown Engineering Inc.  
   (Former Grantee: Teledyne Energy Systems, Inc.)  
   Huntsville, AL

2. **PURPOSE AND LIMITATION:**

   a. This special permit authorizes the transportation in commerce of up to two non-DOT specification pressure vessels containing magnesium or magnesium alloys under an argon gas blanket further packaged in a non-DOT specification wooden box capable of meeting the performance requirements for PG II. 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. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.

   c. No party status will be granted to this special permit.

3. **REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 171-180.

4. **REGULATIONS FROM WHICH EXEMPTED:** 49 CFR § 173.213 in that alternative packaging is authorized as specified herein.
5. **BASIS:** This special permit is based on the application of Teledyne Brown Engineering Inc. dated November 26, 2013, submitted in accordance with § 107.109.

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>Magnesium or Magnesium Alloys with more than 50 percent magnesium in pellets, turnings or ribbons</td>
<td>4.1</td>
<td>UN1869</td>
<td>III</td>
</tr>
<tr>
<td>Argon, Compressed</td>
<td>2.2</td>
<td>UN1006</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7. **SAFETY CONTROL MEASURES:**

   a. **PACKAGING** – Prescribed packaging is a combination packaging consisting of up to 2 metal receptacles, overpacked in a non-specification outer wooden box, designed and constructed to conform to the requirements of a UN4C1 natural wood box, a UN4D plywood box, or a UN4F reconstituted wood box.

   (1) Each inner receptacle is designed, manufactured and “U” stamped in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section VIII, Division 1. The inner receptacle has a MAWP of 60 psig. The pressure vessel is assembled in accordance with the details and drawings on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA).

   (2) Each outer wooden box must be capable of meeting the performance criteria at the PG II level.

   (3) Each completed combination packaging must be designed, constructed, assembled and closed in accordance with the details and drawings on file with OHMSPA.
b. OPERATIONAL CONTROLS - This special permit authorizes the transport of packages containing the hazardous material under an argon blanket at a pressure not to exceed 280 bar (40.6 psia) at 20°C (68°F), subject to the following provisions:

(1) Packages must be prepared, packed and assembled by Teledyne Brown Engineering Inc. employees.

(2) Each inner receptacle may not contain more than 19 Kilograms of magnesium or magnesium turnings.

(3) No more than 3 packages may be transported at any time on one transport vehicle.

(4) All packages must be secured against movement in the transport vehicle.

(5) Transportation for up to three packages is authorized from Huntsville, AL to Aiken, SC.

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 modifications or changes are made to the package 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. Each package must be plainly and durably marked “DOT-SP 14638” as required by § 172.301(c).

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each motor vehicle used to transport packages covered by this special permit.
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.:

[Signature]

for Dr. Magdy El-Sibaie
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.

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