League of Railway Industry Women
2014 Annual Conference

September 22, 2014

Thomas D. Simpson, President, Railway Supply Institute
Railway Supply Institute Committee on Tank Cars

Member Companies:

- American Railcar Industries; American Railcar Leasing; CIT Rail; GATX Corporation; General Electric Railcar Services Corporation; The Greenbrier Companies; Trinity Rail Group, LLC; and Union Tank Car Company

- Build 95 percent of tank cars operating in North America

- Own and lease 70 percent of tank cars in North America
Member Companies:

- **American Railcar Industries; Freight Car America; The Greenbrier Companies; National Steer Car; Trinity Industries; and Union Tank Car Company**

- **Other companies reporting quarterly: Ebenezer; Kasgro; Texana; Watco Mechanical Services**
ARCI Reporting Rules

- Orders are reported in the quarter received after a contract is signed for a car.
- Cars built on spec are not orders until a contract is signed with a customer.
- Options are reported as orders after a customer formally exercises the option.
- Deliveries are reported when the railcar is accepted by the buyer or lessee.
- Cancellations are recorded whenever customers cancel commitments.
  - Cancellations are subtracted from orders and backlog of that specific car type in the next quarter’s report.
  - A footnote to the statistics will indicate cancellations have been reflected if they have occurred.
Crude Oil & Ethanol Initiative Timeline

- **7/ 2009**: Concern develops for Ethanol and Crude Oil train derailments
- **3/ 2011**: Industry sends P-1577 Petition to PHMSA
- **10/ 2011**: Industry voluntarily releases new design standard
- **12/ 2014**: Anticipate rulemaking will be completed
## Estimated Population of Tank Cars Transporting Flammable & Combustible Liquids

<table>
<thead>
<tr>
<th></th>
<th>Petroleum Crude Oil</th>
<th>Ethanol</th>
<th>Other Flammable Liquids</th>
<th>All Flammable Liquids</th>
<th>Other Combustible Liquids</th>
<th>All Flammable &amp; Combustible Liquids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Jacketed DOT 111</td>
<td>22,930</td>
<td>26,983</td>
<td>24,638</td>
<td>66,316</td>
<td>6,009</td>
<td>69,875</td>
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<td>Jacketed DOT 111</td>
<td>6,524</td>
<td>88</td>
<td>8,238</td>
<td>13,792</td>
<td>4,216</td>
<td>16,174</td>
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<tr>
<td>Non-Jacketed CPC-1232 Compliant DOT 111</td>
<td>11,364</td>
<td>751</td>
<td>2,994</td>
<td>14,096</td>
<td>651</td>
<td>14,559</td>
</tr>
<tr>
<td>Jacketed CPC-1232 Compliant DOT 111</td>
<td>7,685</td>
<td>23</td>
<td>1,969</td>
<td>8,557</td>
<td>1,386</td>
<td>8,891</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>48,503</strong></td>
<td><strong>27,845</strong></td>
<td><strong>37,839</strong></td>
<td><strong>102,761</strong></td>
<td><strong>12,262</strong></td>
<td><strong>109,499</strong></td>
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</table>
History of Tank Car Builds: 1988-2000

Total Number of Freight Cars - vs. Number of Tank Cars
1988-2000
(ARCI Data)

- Total Freight Cars
- No Spikes
- Tank Cars

Graph showing the total number of freight cars and tank cars from 1988 to 2000.
History of Tank Car Builds: 2001-2013

Total Number of Freight Cars - vs. - Number of Tank Cars

2001 - 2013

(ARCI Data)

- Total Freight Cars
- Tank Cars


Total Number of Freight Cars

Number of Tank Cars
## TANK CAR REQUALIFICATION SCHEDULE

<table>
<thead>
<tr>
<th>Year</th>
<th>Cars Inspected Initial Cycle (1)</th>
<th>Cars Built Initial 10-YR Cycle (1) &amp; (2)</th>
<th>Cars Built Second 10-YR Cycle (3)</th>
<th>Total</th>
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<tbody>
<tr>
<td>2010</td>
<td>6,275</td>
<td>9,766</td>
<td>NA</td>
<td>15,460</td>
</tr>
<tr>
<td>2011</td>
<td>10,752</td>
<td>7,560</td>
<td>NA</td>
<td>17,854</td>
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<tr>
<td>2012</td>
<td>10,582</td>
<td>5,519</td>
<td>NA</td>
<td>15,698</td>
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<tr>
<td>2013</td>
<td>11,590</td>
<td>8,176</td>
<td>NA</td>
<td>19,272</td>
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<tr>
<td>2014</td>
<td>12,576</td>
<td>8,939</td>
<td>NA</td>
<td>20,977</td>
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<tr>
<td>2015</td>
<td>12,387</td>
<td>11,563</td>
<td>NA</td>
<td>23,351</td>
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<tr>
<td>2016</td>
<td>13,097</td>
<td>12,075</td>
<td>14,034</td>
<td>38,226</td>
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<tr>
<td>2017</td>
<td>15,230</td>
<td>10,415</td>
<td>21,433</td>
<td>45,901</td>
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<tr>
<td>2018</td>
<td>15,923</td>
<td>12,992</td>
<td>21,700</td>
<td>49,350</td>
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<tr>
<td>2019</td>
<td>19,230</td>
<td>13,243</td>
<td>8,942</td>
<td>40,380</td>
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<tr>
<td>2020</td>
<td>6,275</td>
<td>9,766</td>
<td>4,837</td>
<td>20,356</td>
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<tr>
<td>2021</td>
<td>10,752</td>
<td>7,560</td>
<td>8,727</td>
<td>26,363</td>
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<tr>
<td>2022</td>
<td>10,582</td>
<td>5,519</td>
<td>17,666</td>
<td>32,923</td>
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<tr>
<td>2023</td>
<td>11,590</td>
<td>8,176</td>
<td>28,996</td>
<td>47,543</td>
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</table>

(1) T87.6 Task Force data.
(2) American Railcar Institute (ARCI) data.
(3) Total includes a 2.5 % retirement rate.
New Tank Cars – Industry Capacity

- 2014 – 2016 Total Capacity: 101,400
- Current Backlog: 55,400
- Capacity Available: 46,000
- 60% Available for Crude/ Ethanol: 27,600
- Legacy Crude Oil/ Ethanol Fleet: 58,750
Holistic Approach: The Railway Supply Institute proposed to the DOT improvements for the transportation of hazardous materials by rail, including:

- Railroad Policies and Practices
- Emergency Preparedness and Response
- Tank Car Standards
NPRM issued July 23, 2014
- 60-day comment period
- “Holistic” approach
  - Classification
  - Routing
  - Emergency response
  - Speed
  - Braking, etc.

New & Existing Tank Car standards
- Three options for new tank cars built after Oct 1, 2015
- Existing tank cars to be retrofitted, retired, repurposed, or operated under speed restrictions for up to five years.
New Tank Car Standards

Option 1
- 9/16-inch steel
- Electronically Controlled Pneumatic (ECP) brakes
- Rollover protection

Option 2
- 9/16 inch steel
- No ECP brakes or rollover protection

Option 3 (similar to CPC-1232)
- 7/16 inch steel
- No ECP brakes or rollover protection
“Transport Canada is moving forward with a new proposed class of tank car (TC-140) specifically developed for the transport of flammable liquids in Canada by rail such as crude oil and ethanol, as well as a retrofit schedule for older TC/DOT-111 tank cars and the CPC 1232/TP14877 tank car.”
RSI Trade Shows

RSI/CMA 2014 + Canadian Rail Summit
September 21 - 23, 2014
Palais des congrès | Montréal, QC, Canada
120 + Exhibitors & Over 50 Conference Sessions
Hosts: RSI, CMA, CARS, RAC

Railway Interchange 2015
October 4 – 7, 2015
Minneapolis, Minnesota | Minneapolis Convention Center
Over 600 Exhibitors, Indoor & Outdoor Exhibit Space
Over 100 Conference Sessions
Hosts: RSI, CMA, AREMA, REMSA, RSSI
USA Pavilion at InnoTrans 2014
September 23 – 25, 2014
Berlin, Germany | Messe Berlin

USA Pavillon at NT Expo 2014
November 11 – 13, 2014
São Paolo, Brazil | Expo Center Norte
Questions