<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20-12-1</strong></td>
<td>Report of the Committee Membership Task Group (J. Quiter, Chair).</td>
</tr>
</tbody>
</table>
| 20-12-1-a | Act on pending applications for Committee Members.  
See Attachment 20-12-1-a |
| 20-12-1-b | IEEE society membership applications and requests.  
See Attachments 20-12-1-b |
| 20-12-1-c | Review proposed start-up roster for the following new committees with responsibility for NFPA 1, *Fire Code*:  
   - Fire Code Correlating Committee (FCC-AAC)  
   - Technical Committee on Fundamentals (FCC-FUN)  
   - Technical Committee on Building Systems and Special Occupancies (FCC-OCP)  
   - Technical Committee on Special Equipment, Processes and Hazardous Materials (FCC-HAZ)  
   Additionally, consider the disbanding of current the current NFPA 1, *Fire Code* Technical Committee (FCC-AAA)  
   (Note: new Technical Committee rosters included in Report of Committee Membership Task Group)  
   No Attachment |
| **20-12-2** | Report of the Policy and Procedures Task Group (J. Foisel, Chair)  
No Attachment |
| **20-12-3** | Report of the August 2020 Minutes.  
No Attachment |
| **TENTATIVE INTERIM AMENDMENTS (TIA*s)** |
| **20-12-4** | Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise Figures A.11.12.2.1.1(a) and (b) of the 2021 edition of NFPA 1, *Fire Code* (TIA No. 1541). |
| 20-12-4-a | Text of proposed TIA No. 1541.  
See Attachment 20-12-4-a |
| 20-12-4-b | Ballot results of TIA No. 1541. **PASSED** ballot on both technical merit and emergency nature – 29 voting members/23 agree on technical merit/0 disagree/0 abstained/6 ballots not returned/23 agree on emergency nature/0 disagree/0 abstained/6 ballots not returned.  
See Attachment 20-12-4-b |
| 20-12-4-c | No comments were received. |
| **20-12-5** | Act on the issuance of proposed Tentative Interim Amendment (TIA) to delete and replace the entire Annex E of the 2016 and proposed 2021 editions of NFPA 11, *Standard for Low-, Medium-, and High-Expansion Foam* (TIA No. 1540). |
| 20-12-5-a | Text of proposed TIA No. 1540.  
See Attachment 20-12-5-a |
<p>| 20-12-5-b | Ballot results of TIA No. 1540. <strong>PASSED</strong> ballot on both technical merit and emergency nature – 31 voting members/21 agree on technical merit/4 disagree/0 abstained/6 ballots not returned/23 agree on emergency nature/2 disagree/0 abstained/6 ballots not returned. |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-12-5-c</td>
<td>One comment was received.</td>
</tr>
<tr>
<td>20-12-5-c</td>
<td>See Attachment 20-12-5-c</td>
</tr>
<tr>
<td>20-12-6</td>
<td><strong>NFPA 11</strong> Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise current Section 7.6 and 7.6.1 including subsections and Annex material of the 2021 edition of NFPA 11, <em>Standard for Low-, Medium-, and High-Expansion Foam</em> (TIA No. 1519).</td>
</tr>
<tr>
<td>20-12-6-a</td>
<td>Text of proposed TIA No. 1519.</td>
</tr>
<tr>
<td>20-12-6-a</td>
<td>See Attachment 20-12-6-a</td>
</tr>
<tr>
<td>20-12-6-b</td>
<td>Ballot results of TIA No. 1519. PASSED ballot on both technical merit and emergency nature – 31 voting members/23 agree on technical merit/3 disagree/0 abstained/5 ballots not returned/24 agree on emergency nature/1 disagree/1 abstained/5 ballots not returned.</td>
</tr>
<tr>
<td>20-12-6-b</td>
<td>See Attachment 20-12-6-b</td>
</tr>
<tr>
<td>20-12-6-c</td>
<td>No comments were received. No Attachment</td>
</tr>
<tr>
<td>20-12-7</td>
<td><strong>NFPA 13</strong> Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise Table 25.2.5.1.1 for the “maximum storage height” columns of the 2019 edition of NFPA 13, <em>Standard for the Installation of Sprinkler Systems</em> (TIA No. 1518).</td>
</tr>
<tr>
<td>20-12-7-a</td>
<td>Text of proposed TIA No. 1518.</td>
</tr>
<tr>
<td>20-12-7-a</td>
<td>See Attachment 20-12-7-a</td>
</tr>
<tr>
<td>20-12-7-b</td>
<td>Ballot results of TIA No. 1518. PASSED ballot on both technical merit and emergency nature – 36 members/31 agree on technical merit/0 disagree/0 abstained/5 ballots not returned/31 agree on emergency nature/0 disagree/0 abstained/5 ballots not returned. PASSED CC ballot on both correlation and emergency nature – 21 voting members/19 agree on correlation/0 disagree/0 abstained/2 ballots not returned/19 agree on emergency nature/0 disagree/0 abstained/2 ballots not returned.</td>
</tr>
<tr>
<td>20-12-7-b</td>
<td>See Attachment 20-12-7-b</td>
</tr>
<tr>
<td>20-12-7-c</td>
<td>No comments were received. No Attachment</td>
</tr>
<tr>
<td>20-12-8</td>
<td><strong>NFPA 61</strong> Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise the first paragraph of A.9.3.16.5 of the 2020 edition of NFPA 61, <em>Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities</em> (TIA No. 1485).</td>
</tr>
<tr>
<td>20-12-8-a</td>
<td>Text of proposed TIA No. 1485.</td>
</tr>
<tr>
<td>20-12-8-a</td>
<td>See Attachment 20-12-8-a</td>
</tr>
<tr>
<td>20-12-8-b</td>
<td>Ballot results of TIA No. 1485. PASSED ballot on both technical merit and emergency nature – 31 voting members/23 agree on technical merit/1 disagree/2 abstained/5 ballots not returned/21 agree on emergency nature/2 disagree/3 abstained/5 ballots not returned. PASSED CC ballot on both correlation and emergency nature — 16 voting members/11 agree on correlation/1 disagree/0 abstained/4 ballots not returned/10 agree on emergency nature/1 disagree/1 abstained/4 ballots not returned.</td>
</tr>
<tr>
<td>20-12-8-b</td>
<td>See Attachment 20-12-8-b</td>
</tr>
<tr>
<td>20-12-8-c</td>
<td>One comment was received.</td>
</tr>
<tr>
<td>20-12-8-c</td>
<td>See Attachment 20-12-8-c</td>
</tr>
<tr>
<td>20-12-9</td>
<td><strong>NFPA 61</strong> Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise section 9.3.14.2.2.6 of the 2020 edition of NFPA 61, <em>Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities</em> (TIA No. 1538).</td>
</tr>
<tr>
<td>20-12-9-a</td>
<td>Text of proposed TIA No. 1538.</td>
</tr>
<tr>
<td>20-12-9-a</td>
<td>See Attachment 20-12-9-a</td>
</tr>
</tbody>
</table>
### 20-12-9-b
Ballot results of TIA No. 1538. **PASSED** ballot on both technical merit and emergency nature – 31 voting members/22 agree on technical merit/0 disagree/0 abstained/9 ballots not returned/22 agree on emergency nature/0 disagree/0 abstained/9 ballots not returned. **PASSED CC** ballot on both correlation and emergency nature—15 voting members/13 agree on correlation/0 disagree/0 abstained/2 ballots not returned/13 agree on emergency nature/0 disagree/2 ballots not returned. See Attachment 20-12-9-b

### 20-12-9-c
No comments were received. No Attachment

### 20-12-10
**NFPA 70**
Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise 334.10 items (2), (3), and (4) of the 2020 edition of NFPA 70, *National Electrical Code®* (TIA No. 1478).

#### 20-12-10-a
Text of proposed TIA No. 1478.
See Attachment 20-12-10-a

#### 20-12-10-b
Ballot results of TIA No. 1478. **FAILED** ballot on both technical merit and emergency nature – 14 voting members/7 agree on technical merit/5 disagree/2 abstained/0 ballots not returned/7 agree on emergency nature/5 disagree/2 abstained/0 ballots not returned. **PASSED CC** ballot on correlation but **FAILED** on emergency nature –11 voting members/9 agree on correlation/2 disagree/0 abstained/0 ballots not returned/7 agree on emergency nature/4 disagree/0 abstained/0 ballot not returned.
See Attachment 20-12-10-b

#### 20-12-10-c
Twelve comments were received.
See Attachment 20-12-10-c

#### 20-12-10-d
**APPEAL**
Consider the appeal of Joseph Andre, Steel Tube Institute, to overturn the ballot results of TIA No. 1478 and issue the TIA.
See Attachment 20-12-10-d

#### 20-12-10-e
Comment received by Susan Newman Scearce, Code Making Panel 6 Chair, regarding the appeal on the issuance of TIA No. 1478.
See Attachment 20-12-10-e

### 20-12-11
**NFPA 70**
Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise 680.2 Definitions of the 2020 edition of NFPA 70, *National Electrical Code®* (TIA No. 1524).

#### 20-12-11-a
Text of proposed TIA No. 1524. See Attachment 20-12-11-a

#### 20-12-11-b
Ballot results of TIA No. 1524. **PASSED** ballot on both technical merit and emergency nature – 14 voting members/10 agree on technical merit/1 disagree/2 abstained/2 ballots not returned/9 agree on emergency nature/2 disagree/1 abstained/2 ballots not returned. **PASSED CC** ballot on correlation but **FAILED** on emergency nature –11 voting members/9 agree on correlation/0 disagree/0 abstained/2 ballots not returned/5 agree on emergency nature/4 disagree/0 abstained/2 ballots not returned.
See Attachment 20-12-11-b

#### 20-12-11-c
Seven comments were received.
See Attachment 20-12-11-c

#### 20-12-11-d
**APPEAL**
Consider the Appeal of John Mueller, Olathe, KS, to not issue TIA No. 1524 (which is in alignment with the recommendation yielded by the process).
See Attachment 20-12-11-d

#### 20-12-11-e
Comment received by Mike Weaver, Code Making Panel 17 Chair, regarding the appeal on the issuance of TIA No. 1524.
See Attachment 20-12-11-e

### 20-12-12
**NFPA 70**
<table>
<thead>
<tr>
<th>20-12-12-a</th>
<th>Text of proposed TIA No. 1530. See Attachment 20-12-12-a</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-12-12-b</td>
<td>Ballot results of TIA No. 1530. <strong>PASSED</strong> ballot on both technical merit and emergency nature – 14 voting members/10 agree on technical merit/2 disagree/1 abstained/1 ballot not returned/9 agree on emergency nature/3 disagree/1 abstained/1 ballot not returned. <strong>PASSED CC</strong> ballot on correlation but <strong>FAILED</strong> on emergency nature – 11 voting members/10 agree on correlation/1 disagree/0 abstained/0 ballots not returned/8 agree on emergency nature/3 disagree/0 abstained/0 ballots not returned. See Attachment 20-12-12-b</td>
</tr>
<tr>
<td>20-12-12-c</td>
<td>Three comments were received. See Attachment 20-12-12-c</td>
</tr>
<tr>
<td>20-12-13 NFPA 70</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise 210.8(F) of the 2020 edition of NFPA 70, <em>National Electrical Code®</em> (TIA No. 1529).</td>
</tr>
<tr>
<td>20-12-13-a</td>
<td>Text of proposed TIA No. 1529. See Attachment 20-12-13-a</td>
</tr>
<tr>
<td>20-12-13-b</td>
<td>Ballot results of TIA No. 1529. <strong>PASSED</strong> ballot on both technical merit and emergency nature – 15 voting members/12 agree on technical merit/2 disagree/0 abstained/1 ballot not returned/12 agree on emergency nature/2 disagree/0 abstained/1 ballot not returned. <strong>PASSED CC</strong> ballot on correlation but <strong>FAILED</strong> on emergency nature – 11 voting members/10 agree on correlation/0 disagree/0 abstained/0 ballots not returned/8 agree on emergency nature/3 disagree/0 abstained/0 ballots not returned. See Attachment 20-12-13-b</td>
</tr>
<tr>
<td>20-12-13-c</td>
<td>Twelve comments were received. See Attachment 20-12-13-c</td>
</tr>
<tr>
<td>20-12-14-a</td>
<td>Text of proposed TIA No. 1535. See Attachment 20-12-14-a</td>
</tr>
<tr>
<td>20-12-14-b</td>
<td>Ballot results of TIA No. 1535. <strong>PASSED</strong> ballot on both technical merit and emergency nature – 14 voting members/10 agree on technical merit/3 disagree/0 abstained/1 ballot not returned/10 agree on emergency nature/3 disagree/0 abstained/1 ballot not returned. <strong>PASSED CC</strong> ballot on correlation but <strong>FAILED</strong> on emergency nature – 11 voting members/10 agree on correlation/0 disagree/0 abstained/1 ballot not returned/7 agree on emergency nature/3 disagree/0 abstained/1 ballot not returned. See Attachment 20-12-14-b</td>
</tr>
<tr>
<td>20-12-14-c</td>
<td>Two comments were received. See Attachment 20-12-14-c</td>
</tr>
<tr>
<td>20-12-15-a</td>
<td>Text of proposed TIA No. 1537. See Attachment 20-12-15-a</td>
</tr>
<tr>
<td>20-12-15-b</td>
<td>Ballot results of TIA No. 1537. <strong>FAILED</strong> ballot on both technical merit and emergency nature – 14 voting members/4 agree on technical merit/9 disagree/0 abstained/1 ballots not returned/4 agree on emergency nature/9 disagree/0 abstained/1 ballots not returned. <strong>PASSED CC</strong> ballot on correlation but <strong>FAILED</strong> emergency nature – 11 voting members/11 agree on correlation/0</td>
</tr>
<tr>
<td>Date</td>
<td>Description</td>
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<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>20-12-15-c</td>
<td>Six comments were received.</td>
</tr>
<tr>
<td>20-12-15-d</td>
<td>Appeal</td>
</tr>
<tr>
<td>20-12-15-e</td>
<td>Comment received by David Humphrey, Code Making Panel 2 Chair, regarding the appeal on the issuance of TIA No. 1537. <a href="#">See Attachment 20-12-15-e</a></td>
</tr>
<tr>
<td><strong>20-12-16</strong> NFPA 92</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise equations A and B to Annex A.4.4.4.1.4 of the proposed 2021 edition of NFPA 92, <em>Standard for Smoke Control Systems</em> (TIA No. 1531).</td>
</tr>
<tr>
<td>20-12-16-a</td>
<td>Text of proposed TIA No. 1531.</td>
</tr>
<tr>
<td>20-12-16-b</td>
<td>Ballot results of TIA No. 1531. <strong>PASSED</strong> ballot on both technical merit and emergency nature – 31 voting members/29 agree on technical merit/0 disagree/0 abstained/2 ballots not returned/29 agree on emergency nature/0 disagree/0 abstained/2 ballots not returned.</td>
</tr>
<tr>
<td>20-12-16-c</td>
<td>No comments were received.</td>
</tr>
<tr>
<td><strong>20-12-17</strong> NFPA 92</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise Annex A.5.1.1 Example 4 of the proposed 2021 edition of NFPA 92, <em>Standard for Smoke Control Systems</em> (TIA No. 1536).</td>
</tr>
<tr>
<td>20-12-17-a</td>
<td>Text of proposed TIA No. 1536.</td>
</tr>
<tr>
<td>20-12-17-b</td>
<td>Ballot results of TIA No. 1536. <strong>FAILED</strong> ballot on both technical merit and emergency nature – 31 voting members/8 agree on technical merit/20 disagree/1 abstained/2 ballots not returned/17 agree on emergency nature/10 disagree/2 abstained/2 ballots not returned.</td>
</tr>
<tr>
<td>20-12-17-c</td>
<td>No comments were received.</td>
</tr>
<tr>
<td><strong>20-12-18</strong> NFPA 99</td>
<td>Act on the issuance of proposed Tentative Interim Amendment (TIA) to revise 5.1.3.10.2.4 of the 2021 edition of NFPA 99, <em>Health Care Facilities Code</em> (TIA No. 1521).</td>
</tr>
<tr>
<td>20-12-18-a</td>
<td>Text of proposed TIA No. 1521.</td>
</tr>
<tr>
<td>20-12-18-b</td>
<td>Ballot results of TIA No. 1521. <strong>PASSED</strong> ballot on both technical merit and emergency nature – 33 voting members/26 agree on technical merit/3 disagree/0 abstained/4 ballots not returned/24 agree on emergency nature/5 disagree/0 abstained/4 ballots not returned. <strong>PASSED CC</strong> ballot on correlation but <strong>FAILED</strong> on emergency nature –18 voting members/15 agree on correlation/0 disagree/0 abstained/3 ballots not returned/10 agree on emergency nature/4 disagree/1 abstained/3 ballots not returned.</td>
</tr>
<tr>
<td>20-12-18-c</td>
<td>Two comments were received.</td>
</tr>
<tr>
<td>Date</td>
<td>Action</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>20-12-18-d</td>
<td>Appeal</td>
</tr>
<tr>
<td>20-12-18-e</td>
<td>Comment received</td>
</tr>
<tr>
<td>20-12-19</td>
<td>Act on the issuance of proposed TIA</td>
</tr>
<tr>
<td>20-12-19-a</td>
<td>Text of proposed TIA</td>
</tr>
<tr>
<td>20-12-19-b</td>
<td>Ballot results of TIA</td>
</tr>
<tr>
<td>20-12-19-c</td>
<td>No comments were received</td>
</tr>
<tr>
<td>20-12-20</td>
<td>Act on the issuance of proposed TIA</td>
</tr>
<tr>
<td>20-12-21-a</td>
<td>Text of proposed TIA</td>
</tr>
<tr>
<td>20-12-21-b</td>
<td>Ballot results of TIA</td>
</tr>
<tr>
<td>20-12-21-c</td>
<td>Three hundred and two comments were received</td>
</tr>
<tr>
<td>20-12-21-d</td>
<td>Appeal</td>
</tr>
<tr>
<td>20-12-22</td>
<td>Act on the issuance of proposed TIA</td>
</tr>
</tbody>
</table>
Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas (TIA No. 1534).

20-12-22-a Text of proposed TIA No. 1534. See Attachment 20-12-22-a

20-12-22-b Ballot results of TIA No. 1534. **FAILED** ballot on both technical merit and emergency nature – 23 voting members/13 agree on technical merit/5 disagree/0 abstained/5 ballots not returned/13 agree on emergency nature/5 disagree/0 abstained/5 ballots not returned. See Attachment 20-12-22-b

20-12-22-c No comments were received. No Attachment


20-12-23-a Text of proposed TIA No. 1528. See Attachment 20-12-23-a

20-12-23-b Ballot results of TIA No. 1528. **PASSED** ballot on both technical merit and emergency nature – 35 voting members/33 agree on technical merit/0 disagree/0 abstained/2 ballots not returned/32 agree on emergency nature/1 disagree/0 abstained/2 ballots not returned. See Attachment 20-12-23-b

20-12-23-c Two comments were received. See Attachment 20-12-23-c

**REVISION CYCLES**

20-12-24 Consider requests from NFPA Committees to change the respective revision schedules as follows:

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>NFPA 350</td>
<td>2019</td>
<td>PI Closing: January 7, 2025</td>
</tr>
<tr>
<td>NFPA 1192</td>
<td>2018</td>
<td>PI Closing: June 1, 2023</td>
</tr>
<tr>
<td>NFPA 1194</td>
<td>2018</td>
<td>PI Closing: June 1, 2023</td>
</tr>
</tbody>
</table>

See Attachment 20-12-24

**SCOPES**


20-12-26 Consider the request of the Technical Committee on Fire Risk Assessment Methods, to revise the committee name follows:

**Proposed Committee Name:**
Technical Committee on Fire Risk Assessment Methods

See attachment 20-12-26
### NEW PROJECTS

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-12-27</td>
<td>Consider the request of Christopher Wagner, AmeriGas Propane, for a new project on mobile Food Establishments/Mobile Cooking Operations. Eight comments have been received to-date. See Attachment 20-12-27</td>
</tr>
</tbody>
</table>

### REPORTS BACK TO COUNCIL

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-12-28 855 TG Scope Overlap</td>
<td>In accordance with the direction of the Standards Council, the expanded ESS Joint Task Group is reporting back to Council with recommendation of which existing text related to energy storage systems should be removed, updated to reference NFPA 855 or replaced with extracts from NFPA 855. See Attachment 20-12-28</td>
</tr>
<tr>
<td>20-12-29</td>
<td>Review and consider the plan for consolidation of remaining Emergency Response and Responder Safety standards (a.k.a. Groups 3, 4 and 5 respectively) See Attachment 20-12-29</td>
</tr>
</tbody>
</table>

### GENERAL ITEMS

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-12-30</td>
<td>Consider the recommendation of the NEC® Correlating Committee for proposed updates to the NEC Style Manual (effective for the 2023 edition of the NFPA 70®, National Electrical Code®). See Attachment 20-12-30</td>
</tr>
<tr>
<td>20-12-31</td>
<td>Consider the request of Megan Hayes on behalf of NEMA: Listed vs. Certified. See Attachment 20-12-31</td>
</tr>
</tbody>
</table>
| 20-12-32 | Consider the location/method and dates for the upcoming Council meetings in 2021:  
April 14-15, 2021  
Location/Method TBD  
August 2021  
Dates and Location/Method TBD  
December 2021  
Dates and Location/Method TBD |
NFPA 407-2017 and Proposed 2022 Editions

Standard for Aircraft Fuel Servicing

TIA Log No.: 1539

Reference: 5.1.12.4

Comment Closing Date: November 9, 2020

Submitter: Steve Berry, National Air Transportation Association

www.nfpa.org/407

Wording for the 2017 Edition:

1. Revise paragraph 5.1.12.4 to read as follows:

   5.1.12.4 New and existing loading systems shall comply with 5.1.12.1 through 5.1.12.3 within 5 years of the effective date of this edition.

Wording for the proposed 2022 Edition:

1. Revise paragraph 5.1.12.4 and delete associated Annex material to read as follows:

   5.1.12.4* New and existing loading systems shall comply with 5.1.12.1 through 5.1.12.3 by June 2, 2024.

   A.5.1.12.4* This date is consistent with the 5 year phased in for overfill prevention systems as required in the 2017 edition of NFPA 407.

Substantiation: The language in sections 5.1.12.1-5.1.12.4 of the 2017 NFPA 407 mandates automatic shutdown equipped loading racks that are compatible with refueling mounted sensor systems including “existing equipment”. The regular revision process failed to consider that retroactive compliance for existing loading racks and mobile refuelers may be unrealizable for hundreds of airports around the country.

The Aviation Industry is working through unprecedented times as are many industries during this worldwide pandemic. While some midsize to larger airports that are required to follow NFPA 407 (Part 139 Certificated) have already upgraded equipment to be compliant with the NFPA requirements as written, there are hundreds of others who have lost the flexibility to do so. To fulfill the requirement as written is a huge undertaking not just financially but also logistically, even within the time frame originally given in 2017.

Removing the retroactivity statement would allow the industry to progress toward meeting the requirement when new fuel storage systems are being designed/constructed. This type of flexibility and time frame allows the industry to procure the components as well as contractors at a reasonable pace both logistically and financially.

Emergency Nature: The standard contains an error or an omission that was overlooked during the regular revision process. The proposed TIA intends to correct a circumstance in which the revised NFPA Standard has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process or was without adequate technical (safety) justification of the action.
The logistics required to retrofit all existing equipment across the industry are very difficult to contend with during “normal” conditions but are compounded with the current worldwide crises. While many locations own their refueling equipment many more are provided by aviation fuel distributors through lease programs or other arrangements. The leased fleet in the United States is in the thousands and mobile refuelers are moved throughout the country from airport to airport providing the resources to keep America flying. The ability to procure enough components as well as contractor resources to logistically retro fit so many airport fuel storage facilities and existing refueler trucks during these very unstable times will be extremely difficult if not impossible to do.

To conclude, while we all are working to create a safer environment for our industry, we also must weigh the financial viability of changes to keep our industry solvent. These reasons are why we are asking for a TIA removing the existing retroactive language in section 5 specifically 5.1.12.4: This would change 5.1.12.4 to read: New loading systems shall comply with 5.1.12.1 through 5.1.12.3.

Anyone may submit a comment by the closing date indicated above. Please identify the TIA number and forward to the Secretary, Standards Council.
MEMORANDUM

TO: Technical Committee on Aircraft Fuel Servicing

FROM: Yiu Lee, Committee Administrator

DATE: November 19, 2020

SUBJECT: NFPA 407 Proposed TIA No. 1539 FINAL TC BALLOT RESULTS (REVISED)

The public comment circulation has passed, therefore, according to 5.6(b) in the NFPA Regs, the final results show this TIA HAS NOT achieved the ¾ majority vote needed on both Ballot Item No. 1 (Technical Merit) and Ballot Item No. 2 (Emergency Nature).

30 Eligible to Vote
5 Not Returned (Bagnall, Carlton, Loveridge, Osborne, Thomas)

<table>
<thead>
<tr>
<th>Technical Merit:</th>
<th>Emergency Nature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Abstentions</td>
<td>0 Abstentions</td>
</tr>
<tr>
<td>16 Agree (w/comment, Arvin, Creley, Frank, Gerlich, Kassabian, Myers, Sundby)</td>
<td>16 Agree (w/comment, Arvin, Creley, Frank, Gerlich, Kassabian, Myers, Sundby, Thickstun)</td>
</tr>
<tr>
<td>9 Disagree (Brown, Cnota, Demyan, Gambino, LaFlamme, Leahey, Lipari, Skinner, Souza)</td>
<td>9 Disagree (Brown, Cnota, Demyan, Gambino, LaFlamme, Leahey, Lipari, Skinner, Souza)</td>
</tr>
</tbody>
</table>

There are two criteria necessary to pass ballot [(1) simple majority (2) affirmative vote of ¾ of ballots received]. Both questions must pass ballot in order to recommend that the Standards Council issue this TIA.

(1) In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required.

\[
\text{[30 eligible ÷ 2 = 15+1 = 16]}
\]

(2) The number of affirmative votes needed to satisfy the ¾ requirement is 19.

\[
(30 \text{ eligible to vote - 0 not returned - 0 abstentions = 23 × 0.75 = 18.75})
\]

Ballot comments are attached for your review.

The Regs at 1.6.2.(c) state: An appeal relating to a proposed Tentative Interim Amendment that has been submitted for processing pursuant to Section 5.2 shall be filed no later than 5 days after the notice of the TIA final ballot results are published in accordance with 4.2.6.

**Appeal Closing Date** for this TIA is **November 23, 2020**.
QUESTION NO.1: I AGREE with the TECHNICAL MERITS of the Proposed TIA Log No. 1539 to Revise paragraph 5.1.12.4 and delete associated Annex material.

Eligible to Vote: 30
Not Returned: 5
John H. Bagnall,
Haydee Carlton,
Michael Loveridge,
Michael Shawn Osborne,
Scott Thomas

<table>
<thead>
<tr>
<th>Vote Selection</th>
<th>Votes</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>James Gammon</td>
<td></td>
<td>I agree</td>
</tr>
<tr>
<td>Thomas Boriack</td>
<td></td>
<td>agree</td>
</tr>
<tr>
<td>Richard M. Arvin</td>
<td></td>
<td>I agree with the technical merits of this revision based on the unpredictable existing condition of many of the loading racks.</td>
</tr>
<tr>
<td>Jean-Luc Kassabian</td>
<td></td>
<td>Removing retroactivity criteria would help industry coming up with new developments; prevent to refrain due to cost impact. Leveling the safety level by defining new installations with highest standard is also a way to get people involved on improvement</td>
</tr>
<tr>
<td>Paul E. Sundby</td>
<td></td>
<td>Agree that this is a difficult thing to manage for small, older airports. I would agree to make it new and existing IF we could set a minimum annual flowage amount or storage amount? Difficult to do.</td>
</tr>
<tr>
<td>John Ingold</td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>Ronald F. Pattie</td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>Peter E. Buffkin</td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>Dan Frank</td>
<td></td>
<td>B. NFPA 30 already covers bulk loading. Loading of refueler vehicles is outside the purpose of the NFPA 407 as defined in paragraph 1.2.1.</td>
</tr>
<tr>
<td>Nathan R. Gerlich</td>
<td></td>
<td>Agree that applicability should be based on fuel system flow rate.</td>
</tr>
<tr>
<td>Mark W. Straub</td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>Philip Myers</td>
<td></td>
<td>These requirements are more stringent that typical requirements for filling tanks with Class 1 liquids in general. It puts an undue burden where grandfathering should be allowed because there are other options to allow for safe filling of tanks.</td>
</tr>
<tr>
<td>Roy Creley</td>
<td></td>
<td>I agree with what was presented and also feel that by removing the retroactivity part keeps it more in line with the normal NFPA retroactivity statements in most, if not all,</td>
</tr>
<tr>
<td>Steve Thickstun</td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>Michael Kluttz</td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>Charles A. Davis</td>
<td></td>
<td>Agree</td>
</tr>
</tbody>
</table>

Disagree 9
Fred A. Cnota

The overfilling of tankers has been an issue for years. Other NFPA requirements mandate the same thing we did, only we gave a 5 year grace period to get it done. Additionally, this requirement has been discussed at multiple committee meetings, at length, and always passed with a large majority.

Andrew Lipari

I don’t agree with the change.

Brittany Brown

There was a lack of public input for this issue the initially, since 2016, and 2017. There was adequate time for the public to interject, yet they did not.

John Leahey

This section of the standard was included as a response to an ongoing overfilling issue at loading racks, resulting in large fuel spills and hazardous conditions at airports. This was included in the standard with a five year implementation period, this was done in an effort to allow those affected ample time to plan accordingly. Simply requiring this on new construction does not mitigate the overfilling issue being seen at airports.

John J. Demyan

This issue of overfills has been a problem from day one. The major issue is that the current overfill prevention systems do not have existing safety precautions in place.

Cary Skinner

throwing this in on the last hour is only a delay in publication. most airports have made revisions already.

Jeremy Paul LaFlamme

Disagree

Thomas D. Gambino

I disagree with the proposed change

Jeremy Souza

Overfills have been an ongoing problem at aircraft fuel servicing vehicle loading racks, regardless of size or age. This technology has been in use for many years and has been retroactively installed at many airports since its inclusion in the 2017 edition. Additionally, overfill prevention systems are required by NFPA 30-28.11.1.7, without retroactivity provisions, and would be required at loading racks regardless of NFPA 407 requirements. The 5-year phase-in period was intended to bring racks into compliance with NFPA 30 in as reasonable a method as possible. The requirement for overfill prevention systems has been deliberated by the TC at each meeting over a 6-year period and has been consistently maintained.

Abstain

0

QUESTION NO. 2: I AGREE that the subject is of an EMERGENCY NATURE for one or more of the reasons noted in the

Eligible to Vote: 30
Not Returned : 5
John H. Bagnall,
Haydee Carlton,
Michael Loveridge,
Michael Shawn Osborne,
Scott Thomas

Vote Selection  Votes  Comments
Agree  16  I agree
James Gammon
Thomas Boriack  agree: Reason F
Failing to revise this as an emergency nature would render many loading racks out of compliance overnight. As the industry works towards improvements, I believe this is an urgent matter that requires revisions without further delay.

Jean-Luc Kassabian
Forcing operators to proceed with retroactivity criteria may induce opposite effect and prevent the procedure to be efficient. Gap analysis between new and old equipments design may help operators to plan initiate campaign.

Paul E. Sundby
The deadline is fast approaching. Not sure how to manage.

John Ingold
Agree, F

Ronald F. Pattie
Agree

Peter E. Buffkin
F.

Dan Frank
B. NFPA 30 already covers bulk loading. Loading of refueler vehicles is outside the purpose of the NFPA 407 as defined in paragraph 1.2.1.

Nathan R. Gerlich
Because of the negative impact on small airports and suppliers with large refueler fleets, it is an emergency.

Mark W. Straub
F

Philip Myers
All of these operations are in an emergency state due to the Covid19 pandemic.

Roy Creley
I agree because this decision will affect many airports and they need to know the outcome sooner than later as the deadline is fast approaching.

Steve Thickstun
Many smaller airports would be negatively impacted

Michael Klutz
A and F

Charles A. Davis
F

Disagree

Fred A. Cnota
The requirement has been IN PRINT for 4 years. Additionally the committee discussed the same issue at our first and second draft meetings. After much discussion at both meetings the committee agreed not to amend the wording. There has been no public comment since the document was issued in 2016. Many airports have already made the changes required. Blaming the current health crisis for non-action over the past 4 years does not constitute an emergency. The EMERGENCY NATURE has not been met.

Andrew Lipari
This is not an emergency.

Brittany Brown
This item has been in print since 2016, I do not agree with the issue of emergence now. I do not believe that safety is priority, and vote disagree.

John Leahey
I do not see this as an emergency nature nor has this been overlooked by the technical committee; this same topic has been discussed at both the first and second draft meetings on this standard. This is the first time since the 2017 edition was adopted that it has been brought up from outside of the technical committee. All conversations at previous meetings were brought up by committee members and discussed at length. An additional meeting was held regarding the date listed in the standard for this implementation, again with no additional comments.

John J. Demyan
The subject of this question was addressed several times at previous draft meetings. As of today there were multiple opportunities for comment as a result the emergency nature has not been met.

Cary Skinner
there was plenty of time to discuss this during 1st draft public opinion. Not an

Jeremy Paul LaFlamme
D
Thomas D. Gambino

This issue is not of an emergency nature

Jeremy Souza

This was addressed at first and second draft in the 2017 edition without public comment. It was again addressed at the First Draft Meeting (without a public input) for the proposed 2022 edition. A continuation meeting was held solely to discuss the implementation date. No Public Comments were received on the TC's First Revision. This was again discussed at the Second Draft Meeting, and again the TC chose not to modify the text. There have been multiple opportunities over a six-year period to address this issue, none of which were utilized. The emergency nature has not been met.

Abstain 0
Good afternoon, I’m writing to give my thoughts on NFPA 407 and the requirement to add Scully Systems to the fuel farms. In my 25 years in this business I have yet to have a spill caused by over flow of the truck!!! This will cause people to not comply with NFPA standards in my opinion. Also why would you put more financial burden on airports when most are in the red because of covid, Another issue I have with this is one of your board members owns the company that makes the system. Sounds shady!!!!! This will only hurt the integrity of NFPA.

--

Jeremy W. Pultz
Dinwiddie Airport & Industrial Authority Manager
www.ptbairport.com
Members of the 407 Technical Committee,

I would like to voice my support of the proposed change (TIA 1539 attached) that was submitted by the National Air Transportation Association (NATA) in regards to wording of the 2022 edition of the NFPA 407. As the General Manager of an aircraft service business located at Cobb County International Airport just outside of Atlanta, Georgia we are always working to create a safer environment for our industry. But, we also must weigh the financial viability of changes to keep our industry solvent especially during these uncertain times. These reasons are why we support TIA 1539 removing the existing retroactive language in section 5 specifically 5.1.12.4: This would change 5.1.12.4 to read: New loading systems shall comply with 5.1.12.1 through 5.1.12.3.

Please feel free to reach out if you need any further info in relation to my support of the proposed change in TIA 1539.

Sincerely,

David M. Kucko

Hawthorne Global Aviation Services

David Kucko | General Manager
Hawthorne Global Aviation Services
1723 McCollum Parkway | Kennesaw, GA 30144
| www.hawthorne.aero

Building Customer Loyalty One Experience At A Time
To Whom It May Concern:

Atlanta Regional Airport - Falcon Field is owned and operated by the Peachtree City Airport Authority. We own the fuel farm and provide Fixed Base Operator services. We support the Tentative Interim Amendment 1539. We encourage the technical committee to approve the TIA.

I am the Airport Manager and also manage the FBO. I can be reached at the below number.

Thank you,

Hope Macaluso, A.A.E.
Airport Manager
Atlanta Regional Airport - Falcon Field
Good morning. I am a line manager at Ranger Aviation in San Angelo Tx at SJT airport. I completely understand and care about making things as safe as possible when there is an ongoing threat. That being said, I have been the line manager for Ranger for 18 years of my 21 years of employment with Ranger Aviation. We train all of our line techs about the dangers of fuel spills and the environmental effects/impacts and dangers to our community. These types of threats can cause Ranger all types of issues from a dangerous work atmosphere for the employee, an environmental disaster, not to mention a serious financial issue for Ranger Aviation. We take this very serious at Ranger and do not want any of this to occur, and we train accordingly. We have safety meetings weekly and we have a spcc plan in place. We have yearly line fuel training that covers spills and equipment usage and we also do environmental training yearly that covers spill prevention control and countermeasures, stormwater pollution prevention, GHS hazcom, and hazardous waste training. We also train all employees to look for issues that can lead to any kind of spill. In 21 years I have never had a truck over flow at the refuel rack when loading a refueler. I have had a little spillage at the refueler to aircraft phase of the job. The refuelers already have a shut down to keep them from over flowing and I understand it only shuts down 98% of the flow so if there was a lack of training and/or a complacent employee or a broken fuel shut off valve this could be an issue. Again this has not been an issue at our location. I guess what I am getting at is it is hard to justify a expense as large as this on for a small company that has not had this issue. I only run three trucks and only have 2 loading areas and they are leased trucks so every 10 years newer trucks come to this location and if they have not been equipped already to the same equipment that I have, it will be another large expense with no return. I also understand it is nice to safe guard from all the hazards in the world but not all safe guards are feasible for all applications in this industry. I would propose that the wording “and existing” and “by June 2,2021” and “A.5.1.12.4 this date is consistent with the 5 year phase in for overfill prevention systems as required in the 2017 edition of the NFPA 407” be removed from the verbiage of the proposed NFPA 407 2022 edition and an extension added to the current 2017 NFPA 407 on 5.1.12.4 in its entirety until the NFPA 407 2022 edition is adopted and published. Thank you so much for your attention on this matter and have a great day.

Randy Galyean
Line Manager

Ranger Aviation Enterprises, Inc.
PO Box 61010
San Angelo, TX  76906-1010
www.rangeraviation.com

Happy Flying!
Members of the 407 Technical Committee,

I would like to voice my support of the proposed change (TIA 1539 attached) that was submitted by the National Air Transportation Association (NATA) in regards to wording of the 2022 edition of the NFPA 407. As the General Manager of an aircraft service business located at Cobb County International Airport just outside of Atlanta, Georgia we are always working to create a safer environment for our industry. But, we also must weigh the financial viability of changes to keep our industry solvent especially during these uncertain times. These reasons are why we support TIA 1539 removing the existing retroactive language in section 5 specifically 5.1.12.4: This would change 5.1.12.4 to read: New loading systems shall comply with 5.1.12.1 through 5.1.12.3.

Please feel free to reach out if you need any further info in relation to my support of the proposed change in TIA 1539.

Sincerely,

Tom
Members of the 407 Technical Committee,

I would like to voice my support of the proposed change (TIA 1539 attached) that was submitted by the National Air Transportation Association (NATA) in regards to wording of the 2022 edition of the NFPA 407. As the General Manager of an aircraft service business located at Sioux Gateway Brigadier General Bud Day Airport at Sioux City Iowa, we are always working to create a safer environment for our industry, but we also must weigh the financial viability of changes to keep our industry solvent especially during these uncertain times. These reasons are why we support TIA 1539 removing the existing retroactive language in section 5 specifically 5.1.12.4: This would change 5.1.12.4 to read: New loading systems shall comply with 5.1.12.1 through 5.1.12.3.

Please feel free to reach out if you need any further info in relation to my support of the proposed change in TIA 1539.

Sincerely,

David Zimmerman | General Manager
5815 Mitchell St, | Sioux City, IA 51111
| www.hawthorne.aero

Building Customer Loyalty One Experience At A Time
Hello NFPA,

We are writing to support the approval of TIA 1539.

We are an independent FBO operator at the Gary / Chicago International Airport (KGY). GYY is a part 139 airport just outside of Chicago in Gary, Indiana.

We believe that this TIA should be approved to eliminate the need to install unnecessary and redundant backup systems on our existing fuel trucks and our fuel farm. We understand that this is a new generation of prevention, but we have current systems that prevent these concerns from happening and it seems unnecessary to modify our existing equipment.

In addition, with the current economic crisis caused by the pandemic this is not the right time to have to spend this extra money on a back up system that is not needed.

Thank you for you time and consideration and we hope this TIA is approved.

John

John A. Girzadas
President

B. Coleman Aviation, LLC
5701 Airport Road
Gary, IN 46406
www.b-coleman.com
Good afternoon,

My name is Ryan Maxfield and I am the Chief Revenue Officer and partner of Aero Management Group and Jet Access Aviation. I oversee the seven (7) FBO’s we operate and 40+ jets we manage/charter. Our respective companies support TIA 1539 ask kindly encourage the tech. committee to approve the TIA. The requirement to have “skully” type systems on all our existing fuel racks and fuel trucks would take a devastating, financial blow to a business that has already struggled with the complications of Covid-19.

I thank you in advance for your consideration,

Sincerely -

[Signature]

Ryan Maxfield

Aero Management Group

Jet Access Aviation
Good afternoon,

By way of introduction, I am Cherie Hecker, Chief Operating Officer of Air 7. Air 7 is located at the Camarillo Airport in Camarillo, CA (KCMA). We are a small locally owned FBO. We have survived the Worldwide COVID-19 pandemic and things are starting to look brighter for us. We employ 31 people and have been doing our best during these crazy times.

If we were to have to retrofit our fuel tanks and fuel trucks, it would cause an economic burden to us that would be very difficult to bear. Therefore, I am showing my support for Proposed TIA 1539 brought on by NATA.

Best regards,

Cherie Hecker
Chief Operating Officer

575 Aviation Drive
Camarillo, CA 93010
www.flyair7.com
From: Keith Holt  
Sent: Tuesday, October 6, 2020 9:36 AM  
To: Shared TIAs  
Subject: Proposed TIA 1539 - NFFPA 407

On behalf of the Virginia Tech Montgomery Executive Airport in Blacksburg, Virginia I am writing to express our support of the proposed TIA 1539 to NFPA 407 – Standard for Aircraft Fuel Servicing.

The Virginia Tech Montgomery Executive Airport is a general aviation airport and the airport is also the Fixed Base Operator that is responsible for the fueling operations. We typically sell roughly 140,000 gallons of fuel each year.

We operate and maintain a fuel farm with separate storage tanks for both Jet A and 100LL; as well as a refueling truck that is leased from a fuel vendor for Jet A dispensing and a fueling trailer that is owned by the Airport for 100LL dispensing.

Our daily fueling checks and procedures include methods to account for and limit the risk of over-fueling our fuel tanks. These include electronic gauges of the fuel storage tanks, which includes leak detection alerts. Tracking and recording of the amount of fuel dispensed and available in each tank. Methods to “dip” the refueler tanks to double-check the volume of fuel, pressure shut off switch, as well as meters to verify the amount of fuel that is going into the refueling truck versus what the capacity is, and deadman controls to shut off fuel flow.

The additional burden of cost to retrofit our existing operation with a new system is cost-prohibitive and does not take into account other local controls and procedures already in place. Also, we have just begun a process of designing a new fuel farm and loading rack, however, construction of this facility is still likely 3-5 years away. While the new system will meet all NFPA 407 requirements, including a “Scully System” if required. To retrofit our old system while a new system is being planned and budgeted does not make good financial sense. In addition, we are experiencing challenges in our industry with getting contractors to bid on and commit to doing work during the COVID pandemic, so we expect that having the required equipment installed by a qualified contractor in a timely and cost-efficient manner will be challenging.

We hope that you will consider our comments and believe TIA 1539 is an appropriate measure, and we encourage the NFPA 407 Technical Committee to support this measure.

Please feel free to contact me if you have any questions or if I can provide any additional information.

Sincerely,

- Keith

Keith Holt, C.M.  
Airport Director  
**Virginia Tech/Montgomery Executive Airport**  
1601 Research Center Drive  
Blacksburg, VA 24060
TO NFPA & 407 Technical Committee Members:

The Floyd Bennett Memorial Airport (Warren County, NY) is in strong support of TIA 1539.

Warren County New York is the owner and operator of the Floyd Bennett Memorial Airport (GFL) and supporting the Fixed Base Operator requirements of the airport is Rich Air (FBO). GFL is an FAR part 139 airport that serves the general aviation community of the Lake George region of upstate NY. The airport has one FBO and a County owned fuel farm, the fuel farm delivers approximately 250,000 gallons of fuel annually to its users and revenue helps support the airport's expenses.

The proposed requirement to retrofit the Scully Type system into our existing fuel farm represents a costly and burdensome requirement that will place an additional hardship on the airport, the FBO and ultimately its users. Due to COVID 19 we are experiencing a 24% decrease in activity which further adds to the economic consequence of this requirement.

We ask that the retroactive language be removed and that TIA 1539 be approved.

Please feel free to contact me if you require additional information.

Best regards,

Don

Don DeGraw
Airport Manager
Floyd Bennett Memorial Airport (GFL)
Dear Technical Committee,

This message is to express our support of TIA 1539.

While our organization fully supports the safe handling of aviation fuels, the task of retrofitting our fueling systems with automatic shutdowns (“skully’s”) during these unprecedented times will cause us to incur nearly insurmountable expenses with minimal safety improvements. We are an FBO serving the general aviation industry at a small general aviation airport located in Youngstown, Ohio. With business down more than 50%, a $40K expense to update our fueling systems could be crippling to our cash flow.

Please consider approving TIA 1539.

Respectfully,

Donald Taylor

Donald Taylor
Owner | Managing Member
| www.jetsfbo.com
1453 Youngstown-Kingsville RD, Vienna, OH 44473
Members of the 407 Technical Committee,

I would like to voice my support of the proposed change (TIA 1539 attached) that was submitted by the National Air Transportation Association (NATA) in regards to wording of the 2022 edition of the NFPA 407. As the General Manager of an aircraft service business located at Tuscaloosa National Airport in Tuscaloosa, Alabama, we are always working to create a safer environment for our industry. But, we also must weigh the financial viability of changes to keep our industry solvent especially during these uncertain times. These reasons are why we support TIA 1539 removing the existing retroactive language in section 5 specifically 5.1.12.4: This would change 5.1.12.4 to read: New loading systems shall comply with 5.1.12.1 through 5.1.12.3.

Please feel free to reach out if you need any further info in relation to my support of the proposed change in TIA 1539.

Sincerely,

Steve
I support TIA 1539 and its proposed change to NFPA 407. With our fuel sales down 80% due to pandemic, I simply can’t afford the capital that would be needed to change my existing fuel system infrastructure. And I believe adhering to NFPA 407 and other existing regulations adequately protect people and the environment. If there is macro data to the contrary I urge NFPA to publish it so we can consider it.

Thank you for the opportunity to comment.

Jeff Davis

Jeff Davis
Director of Safety, Training and Facilities
Wisconsin Aviation
Dane County Regional Airport - KMSN

www.wisconsinaviation.com
www.linkedin.com/in/jeffreyleedavis
I support TIA 1539 and encourage the technical committee to approve the TIA.

I am the V Chairman of the Lincoln County Nevada Airports Board. I am in charge of our self-serve fuel system.

Wendy Rudder

--
Sent from Gmail Mobile

SECOND EMAIL
From: Wendy Rudder
Sent: Friday, November 6, 2020 5:38 PM
To: Shared TIAs <STIAs@nfpa.org>
Subject: TIA1539

I am the V Chairman of Lincoln County Airport Authority. I manage two small unmanned rural GA airports. One airport has 100LL self serve. We have a very small annual budget and requiring us to retrofit for a “scully” is not possible. This would put us out of business.

I support TIA1539 and encourage the technical committee to adopt it.
Good Morning,

I am writing on behalf of the Fargo Jet Center located in Fargo, North Dakota. We operate a privately owned FBO where I manage the Line Department responsible for the handling of business and privately owned aircraft. One of my roles is to also oversee fueling operations with our commercial airline customers, and therefore adhere our company to ATA 103 and NFPA 407. I wholly support TIA 1539 because being a privately owned company means that most of our equipment is (although in good condition) many years old. Enforcing the use of a scully type system on each piece of old equipment would mean our company shelling out tens of thousands of dollars into retrofitting trucks and farms that already have automatic fuel shut off systems in place. I understand the need for new loading systems to be outfitted with this equipment, however I agree that the language of the proposed changes needs to remove “existing equipment”. I encourage the technical committee to approve the TIA 1539 in order to save companies like Fargo Jet Center tens of thousands of dollars.

I appreciate your time and consideration in reading this email. If you would like to contact me, all information in my signature block below is correct and up to date.

Thank you,

Jake Edwards  
Assistant Line Services Manager | Fargo Jet Center  
3802 20th Street North, Fargo, ND 58102  
fargojet.com
I support TIA 1539. We are a small airport with a small FBO. If we were to have to retrofit our existing equipment, the FBO would suffer a major hit. We already have a tight budget and would have to make some major changes to add $13,000 to our budget. Please consider approving TIA 1539 so the smaller airports and FBOs can sustain our businesses and continue to support the general aviation community.

Thanks,

Matthew D. Wiebe, Airport Manager
City of Wellington
441 N. West Rd, Wellington, KS 67152
10/8/2020
In reading of the proposed TIA 1539 this would help the Morgantown Municipal Airport out. The cost of this "Scully Type System" it would cost the Morgantown Municipal Airport Just work being done on Ramp Truck Refuelers is $4,912.69 plus fuel farm tank work $15,500 and $6,200 for grounding system this is to retrofit a fuel farm that’s from the 1990's which brings total to $26,612.69. This is not a cheap fix for any airport I could understand if I was installing a new fuel farm then all that cost would be in it, but we are not so THE MORGANTOWN MUNICPLE AIRPORT SUPPORT PROPOSED TIA 1539. Thanks
Kenny Myers
Superintendent
Morgantown Municipal Airport
Foran, Rosanne

From: Gordy Vetsch  
Sent: Thursday, October 8, 2020 1:02 PM  
To: Shared TIAs  
Subject: Support for proposed TIA 1539.

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear 407 committee members,

I strongly encourage the 407 technical committee to approve the TIA 1539. This totally unfair to ask operators to retrofit existing equipment. Especially during this Covid crisis when revenues are a fraction of what they were and we are struggling to make a profit now.

I have been in business for over twenty years and have never had an overfill event or even heard of one that a secondary control would have stopped.

If you feel it is really necessary to have this for true safety reasons, then apply it to new fuel farm and truck installations only!

Sincerely,

Gordy Vetsch  
FBO Supervisor  
Dubuque Jet Center  
11000 Airport Rd  
Dubuque, IA 52003

The City of Dubuque is committed to and prepared for providing all essential services to our residents during the Coronavirus (COVID-19) pandemic.  
Most City of Dubuque offices and facilities are closed to the public through at least May 3, 2020, but staff are still working.  
We are continuing to provide services to the public electronically, by phone, by mail, and when/if necessary, by appointment.

- For contact information and service delivery changes for all departments, visit www.cityofdubuque.org.  
- To report a concern or submit an online service request, visit www.cityofdubuque.org/citizensupport.  
- For the latest local information on COVID-19, visit www.cityofdubuque.org/covid19 or call 563.
Good Morning,

As a small FBO with 2 fuel farms and 1 fuel truck these added regulations and exorbitant costs would cause a HUGE financial burden in this already troubling time for business owners in aviation. Please reconsider approving the TIA. I have been running an aviation business for 21 years and am finding in these times of larger governments and massive regulations its exhausting and stressful to encourage young entrepreneurs to want to venture out and take on a small business.

Prayerfully consider the detrimental effect this would have on so many small businesses.

Peace to you

Angie Voigt
To whom it may concern:

Please be advised that the Porter County Regional Airport, in Valparaiso, Indiana, supports the Tentative Interim Amendment (TIA), Number 1539, which proposes important changes to NFPA 407-2017, and the Proposed 2022 Editions of the Standard for Aircraft Fuel Servicing. The TIA has been originally submitted by the National Air Transportation Association (NATA). The language in sections 5.1.12.1-5.1.12.4 of the 2017 NFPA 407 mandates automatic shutdown equipped loading racks that are compatible with refueler mounted sensor systems, including “existing equipment”. The regular revision process failed to consider that retroactive compliance for existing loading racks and mobile refuelers may be unrealizable for hundreds of airports around the country. I have been associated with the Airport and aviation fueling operations for over thirty-four (34) years, and an active line firefighter for the last twenty-four (24) years. Throughout this period, our Airport has successfully used the standard Bottom Loading System with pre-check and an automatic high-level shut-off control on our Aircraft Refuelers, with a history of no incidents.

The Aviation Industry is working through unprecedented times, as are many industries, during this worldwide pandemic. While some midsize to larger airports that are required to follow NFPA 407 (Part 139 Certificated) have already upgraded equipment to be compliant with the NFPA requirements as written, there are hundreds of others who have lost the flexibility to do so. To fulfill the requirement as written is a huge undertaking, not only financially, but also logistically. Removing the retroactivity statement would allow the industry to progress toward meeting the requirement when new fuel storage systems are being designed/constructed. The flexibility and time frame proposed in the TIA would allow the Aviation Industry to procure the necessary components, as well as the likelihood of available contractors to do such work, under a more reasonable planning process, both logistically and financially. Honestly, the logistics required to retrofit all existing equipment across the industry would be very difficult to contend with during “normal” conditions, but are compounded greatly considering the “new normal” of the current worldwide pandemic crisis.

The standard also contains an error or omission that was overlooked during the regular revision process. The proposed TIA intends to correct a circumstance in which the revised NFPA Standard has resulted in an adverse impact on a product or method that was inadvertently overlooked in the revision process, or that was without adequate technical (safety) justification of the action. While many locations own their refueling equipment, like our Airport does, many more are provided by aviation fuel distributors through lease programs or other arrangements. The leased fleet in the United States totals in the thousands, and mobile refuelers are moved throughout the country from airport to airport, providing the resources to keep our nation’s aviation fleet in the air. The ability to procure enough components, as well as contractors, to logistically retrofit so many airport fuel storage facilities and existing refueler trucks, during these very unstable and trying times, will be extremely difficult, if not impossible, to achieve.

With this, please consider these comments, and the proposed changes submitted by NATA in TIA 1539, in your Association’s (Technical Committee’s) actions concerning NFPA 407-2017, and the Proposed 2022 Editions, of the Standard for Aircraft Fuel Servicing. Thank you for your time and consideration of this matter.

Sincerely,

November 20, 2020
Secretary, Standards Council.

My name is Michael Heilpern and I am the Operations Manager for the Monterey Jet Center the premier full service FBO, which is located on the Monterey Peninsula Airport in Monterey, California. I am sending you this email today to let you know that I fully support the efforts to have the Technical Committee adopt as soon as possible TIA 1539.

TIA 1539 would correct an error or an omission in the current standard, 5.1.12.4 that was overlooked during the regular revision process. The consequences of not approving TIA 1539 has the potential to be very damaging to our industry, especially during these very unprecedented times. We are all working to create a safer environment for our industry and it is vital that the Technical Committee approve TIA 1539.

Thank you for your time and please feel free to contact me if you have any questions.

Sincerely,

Michael Heilpern
Operations Manager
Monterey Jet Center
I clearly support TIA 1539 and encourage the technical committee to approve the TIA. This is vital to our industry.

Thanks,
David Mittleman
Regional Manager
Avfuel Corporation

www.avfuel.com
I support TIA 1539. The requirement to retro fit my facility would be an extreme hardship for our small family owned business. We've been in business over 40 years without incident. Thankyou for your consideration of TIA 1539.

Bond Cosby --Brooks Co Airport.
Hello,

I just want to voice my support for TIA 1539 and encourage the technical committee to approve the TIA! I have given this a lot of thought over the years since I first heard about the requirement change about five years ago. It seems that with all the overfill prevention procedures already in place, the scully system would just add false reliance and another system that could malfunction and prevent daily procedures.

I am the line service manager at Wells Aircraft, Inc. at KHUT. It is a small FBO in Kansas that would be severely burdened by the added cost to retrofit old equipment with a system that seems impractical. I would like to thank you for taking the time to hear my opinion on this matter! Thanks again.

Mike Winkler
Line Service Manager - Wells Aircraft, Inc.
Foran, Rosanne

From: Hinkle, Rex
Sent: Friday, October 9, 2020 12:07 PM
To: Shared TIAs
Subject: Please Support TIA 1539 - Cook Aviation/Bloomington, IN

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

The NFPA & The 407 Technical Committee:

Cook Aviation located in Bloomington, Indiana (KBMG) is a small FBO in our 32nd year of business. I am hearing that there is a proposed change to NFPA 407 requiring general aviation airports and FBOs to retrofit their fuel farms and mobile refuelers with automatic shutdown system. This will cost Cook Aviation and other FBOs who are already financially burdened several thousands of dollars. With the COVID-19 Pandemic, undue stress is already placed on small businesses and extra expenses could cause companies to cease to exist.

NATA has proposed a Tentative Interim Amendment (TIA) removing the retroactive nature of the current language in NFPA 407, applying it to only new fuel farm/fuel truck installations. When an FBO is preparing to build a new aviation fuel farm or add an additional fuel truck, then this new equipment can be planned. When I had the aviation fuel farm built in November 1998, no such regulation was required. I complied with all regulations governing installation of aviation fuel farms at that time. Cook Aviation has a safety pre-check system and dead-man control located on the fuel farm which is implemented every time fuel is transmitted from the fuel farm to the trucks. There also is a safety high level shut off system in place which has not failed. The safety pre-check on the fuel trucks have not failed. Training is very important to make sure employees operating the systems do not override the safety protocol already in place. That is why training is so important, to make sure employees do not become complacent. At our company, we have had no problems/issues with overspill. I see no value in adding the proposed retrofit as the safety pre-check already in place works. We also have emergency “STOP” red push buttons located at the fuel farm, side of the operation building, and inside our FBO. This red button with emergency signage is highly visible and shuts down the fuel farm system immediately when activated. Asking our company and other FBOs to add thousands of dollars to our operating expenses is not the right thing to do currently.

Cook Aviation is in support of TIA 1539 and strongly encourage the Technical Committee to approve the TIA. Our company specializes in customer services providing aviation fuels (Jet A & 100LL Avgas), courtesy & rental vehicles, ground services, concierge, and aircraft catering.

In conclusion, Cook Aviation is in support of TIA 1539 and encourage you to support this Amendment.

Thank you,

Rex G. Hinkle, President
970 S. Kirby Road
Bloomington, Indiana  47403
To Whom it May Concern,

I am an Aviation Fuel Sales Manager that covers all of VA, WV and MD. I deal with numerous FBO/Airport Operators that are very concerned about the expense of upgrading their storage tanks and aircraft refuelers to comply with the new code for Auto Shut Down Systems (Scully Systems). To include this expense in financing for a new system is not too much to ask, but retrofitting existing systems is a tougher pill to swallow, especially when most Airport/FBO operators have not even heard of an incident that this system would have prevented.

I strongly urge the NFPA 407 to adopt TIA 1539 and only ask that new systems include the Auto Shut Down System.

Best regards,

Quinn Redden
Sales Representative
Mid Atlantic Region

titanfuels.aero
To Whom it May Concern,

I am the General Manager for APP Jet Center in Manassas VA. I deal with numerous Airport Operators that are very concerned about the expense of upgrading their storage tanks and aircraft refuelers to comply with the new code for Auto Shut Down Systems (Scully Systems). To include this expense in financing for a new system is not too much to ask, but retrofitting existing systems is a tougher pill to swallow, especially when most Airport/FBO operators have not even heard of an incident that this system would have prevented.

I strongly urge the NFPA 407 to adopt TIA 1539 and only ask that new systems include the Auto Shut Down System.

Best regards,

A.J. Para
General Manager
APP Jet Center Manassas
9998 Wakeman Drive
Manassas Virginia 20110
To Whom it May Concern,

I am the Vice President of APP Jet Centers. This issue/proposal is of concern as it would require great expense to our firm. Further, I can foresee, after 30+ years in this industry, problems and breakdowns of the system occurring. And failures of this type of system could result in loss of business during critical times. It does make me wonder how this came about and who stands to profit from the sale of these systems? Is the stake holder in this, perhaps, a member of the deciding board with NFPA, maybe a seated consultant? Are there known calamities that have led to this proposal?

I strongly urge the NFPA 407 to adopt TIA 1539 and only ask that new systems include the Auto Shut Down System.

Kindest regards,

Christopher Hambleton
APP Properties, Inc
2982 Curtis King Blvd
Fort Pierce, FL 34946
Please allow the proposed changes to the
NFPA 407-2017 and proposed 2022 editions
Standard for aircraft fueling services
TIA log 1539 reference 5.1.12.4
My husband and I are owners of a small private/public airport in Edgewood NM.
We are only 1 of 2 private/public airports of the 59 small airports in New Mexico and neither of us are candidates for state or federal funds. We do have old equipment, but have inspections regularly, and it has always passed.
We have to come up with our own money to keep things running and take care of the unexpected. We don’t make a good profit but are able to keep our pilots going. We are an important location and need to keep open.
We do not have the flexibility, means or support to put forth the money this proposal, before changes, reads. Please allow us to stay in business.
Thank you
Kay Tanis
Sandia Airpark Inc
71 Rainbow rd Edgewood NM, 87015
Runway 1N1
Hello –

I am in support for TIA 1539 on NFPA 407 and respectfully request the technical committee to approve this amendment.

We operate a small, family-owned Fixed Base Operator (FBO) at Meadows Field (BFL). My role as Safety Coordinator is to help implement policies including IS-BAH and NFPA 407 to keep our employees focused on safely servicing aircraft.

Thank you for your consideration.

Daniel Samms
Safety Coordinator
Loyd’s Aviation

The Harlan Municipal Airport is a small general aviation airport. The Airport Commission is looking into updating fuel system in the future. But the city budget for the airport does not have funds to do any upgrading. Will have to find funding help or at the least get the city to set aside funds over a period of years to fund the upgrade. The best thing for the City of Harlan is to be able to defer until new system is installed. That is why I support TIA 1539 to State only for new construction.

Thanks

Scott Pigsley
Harlan Airport Manager

Harlan Municipal Airport
610 Hwt 59
Harlan, Ia. 51537
Hello,

I have read TIA 1539 and fully agree with its reasoning and wording. Our company specializes in the sale of Aviation Equipment, and we have noticed that refuelers (fuel trucks) are in very high demand right now. We have established great relationships with our customers, and we understand their needs when buying and selling equipment. Adding a regulation that imposes massive cost and inconvenience on businesses is unconscionable, and should be amended immediately.

Regards,
Alec Berger
The FBOGSE Team
To Whom it May Concern,

I am an FBO General Manager with over 15 years of experience. I am very concerned about the expense of upgrading our storage tanks and aircraft refuelers to comply with the new code for Auto Shut Down Systems (Scully Systems). To include this expense in financing for a new system is not too much to ask, but retrofitting existing systems is a tougher pill to swallow, especially when most Airport/FBO operators have not even heard of an incident that this system would have prevented.

I strongly urge the NFPA 407 to adopt TIA 1539 and only ask that new systems include the Auto Shut Down System.

Best regards,

Tom Panico
General Manager
APP Jet Center Hayward
21889 Skywest Dr
Hayward, CA 94541

www.appjetcenter.com
I am in support of TIA 1539. Please approve this amendment.

I own a small FBO. We survive on thin margins. This a burden that I do not need in this time of a pandemic.

Sincerely,

Mike LaSalle
President
Evanston Aviation, Inc.
October 12, 2020

To Whom It May Concern:

I am writing to show my support for proposed TIA 1539. As a small business in South Dakota the impact of the costs to comply with NFPA 407’s retroactive requirements would significantly impact our ability to serve our customers.

The cost of the Scully-type system would be significant, approximately $61,000 for our facility which includes 4 fuel farm tanks and six fuel trucks. We have already been faced with a significant downturn in operations due to COVID-19 and have had to change the way we operate as a result. Another large expense to us as an operator would impact our ability to serve our community, both General Aviation and the Air Carriers and the cost which would need to be passed on. All of our equipment, including fuel farms have auto shutoffs, high level shutoffs and complete bonding systems.

Being a small business in rural South Dakota we have also found other significant challenges in retrofitting this system to our tanks and trucks. There are no facilities in our state or the surrounding area. It could take months or even years for all of our tanks and trucks to be outfitted if this is passed, making much of our equipment unusable by June 2021. Westjet has been in business since 1959 and my husband and myself have owned the FBO for 45 years without any incidents.

I fear for us as well as other FBOs and fuel providers throughout South Dakota and other rural areas. The impact of this would be devastating for operators of all sizes from both a cost perspective as well as the ability to find a contractor to install the equipment.

It is for the above reasons I fully support TIA 1539.

Regards,

Linda N. Rydstrom
President
Westjet Air Center, Inc.
4190 Westjet Drive
Rapid City, SD 57703

www.westjetair.com
My name is Wes McVey and I am the FBO Manager of the Morgantown Municipal Airport. I have read the NATA’s proposed TIA 1539 and feel it should be approved.

I understand the need for automated shutdown systems (scully) and I am in agreement that all newly constructed & renovated fuel farms and mobile refuelers should be required to be outfitted with some type of this system. However, to have to retrofit our current fuel farm and refuelers with this system would be financially detrimental to our airport during a good year...and this has not been a good year for our airport due to COVID-19.

We have had estimates done to see what it would cost us to comply with these demands. They are as follows:
- Mobile Refuelers - $4,900.00+
- Fuel Farm Tanks and Plumbing - $15,500.00+
- Fuel Farm Grounding System - $6,200.00+
- Total - $26,600.00+

This is not a small amount of money, but this is a small airport. We cannot afford to do this.

We support TIA 1539 and we ask that you do as well.

Respectfully,
Wes McVey
Morgantown Municipal Airport
FBO Manager
Dear 407 committee members,

I strongly encourage the 407 technical committee to approve the TIA 1539. This totally unfair to ask operators to retrofit existing equipment. Especially during this Covid crisis when revenues are a fraction of what they were and we are struggling to make a profit now.

I have been in business for over twenty-five years and have never had an overfill event or even heard of one that a secondary control would have stopped.

If you feel it is really necessary to have this for true safety reasons, then apply it to new fuel farm and truck installations only!

Regards,

Dan Klaas
Assistant Airport Director
Dubuque Regional Airport
11000 Airport Road
Dubuque, IA 52003-9555

www.flydbq.com

HERE FOR YOU: Dubuque Regional Airport and City of Dubuque is committed to and prepared for providing all essential services to our customers, tenants and residents during the Coronavirus (COVID-19) pandemic. Dubuque Regional Airport is open, most City of Dubuque offices and facilities are closed to the public, but staff are still working. We are continuing to provide services to the public electronically, by phone, by mail, and when/if necessary, by appointment.

- American Airlines latest information, visit www.aa.com
- To report a concern or submit an online service request, visit www.cityofdubuque.org/citizensupport.
- For the latest local information on COVID-19, visit www.cityofdubuque.org/covid19 or call 563.556.6200.
- For contact information and service delivery changes for all departments, visit www.cityofdubuque.org.
Good Morning, my name is Mike Talbot and I’m the General Manager of Glacier Jet Center in Kalispell, MT. I support TIA 1539 and hope that you will approve the TIA. As a small business with less than 50 employees we operate 9 mobile refuelers and 4 loading racks at the fuel farm. Over the last six months, we’ve watched our airline fuel business erode by more than 60% and been forced to furlough staff to make ends meet. We were fortunate to receive help through the Payroll Support Program which carried us through September 2020. As our summer traffic departs and our PSP funds are gone we’re looking at another time of great uncertainty. The costs associated with overhauling our facility IAW the 407 by June 2021 will have significant negative impacts to our business. Please help us through these unprecedented times.

Respectfully,
Mike Talbot
General Manager
Glacier Jet Center

NOTICE: The information contained in this message is proprietary and/or confidential and may be privileged. If you are not the intended recipient of this communication, you are hereby notified to: (i) delete the message and all copies; (ii) do not disclose, distribute or use the message in any manner; and (iii) notify the sender immediately.
Good morning,

With respect to the above and it’s possible integration to NFPA 407 Standard, I would like to comment as follows:

The integration of TIA 1539 by the National Fire Protection Association would greatly help the Fitchburg Municipal Airport as we operate on a shoestring, like most GA Airports and we have been in operation since the mid 1920’s.

We have three main fuel tanks plus two fuel trucks servicing the local and in transit planes to the airport.

Our current tanks are signed off by the Fitchburg Fire Department as complying to the Fire Prevention Codes.

The on cost for the Fitchburg Municipal Airport to install these Automatic Shutdown Systems comes at a time when money is scarce, Covid-19 is prevalent - and generally GA airports are cash strapped and running slow.

I would fully support the TIA 1539 in it’s entirety and respectfully request the NFPA Technical Committee to approve TIA 1539 in applying it to only new Fuel Farms and new Fuel Trucks installations.

Respectfully,

Peter.

Peter E. Kettle
Interim Airport Manager
Fitchburg Municipal Airport
Fitchburg
Ma 01420.
Air Services of Mississippi Inc. supports TIA1539.

Ricky E. Simpson
President
Air Services of Mississippi Inc.
2051 John E Lewis Drive
McComb, Ms

Sent from my iPhone
Good morning:

Recently you received TIA 1539 from the National Air Transportation Association (NATA). In this they request grandfathering in current fuel tanks and trucks from the automatic shutoff valve requirements coming out in the new NFP 407. I encourage you to listen to what NATA is requesting. Adding these shutoff valves to our equipment will be an economic hardship for our company.

Please accept NATA’s TIA 1539, to help protect our industries economic well-being. We are already dealing with the effects of Covid-19.

Sincerely,

Jeff Pittard
President
Purdue Aviation, LLC.
I support the proposed amendment. The Vicksburg Municipal Airport has two fuel trucks and a self-serve tank farm. Considering the effect of the Covid-19 pandemic on our business, an 80% reduction in airport revenues, any required additional equipment would place an undue monetary burden on the airport budget.

Ron Davis
Airport Director
Vicksburg Municipal Airport
To Whom It May Concern:

As airport director of False River Regional Airport, I fully support TIA 1539. I respectfully urge the 407 Technical Committee to approve TIA 1539.

The False River Regional Airport is a rural General Aviation airport located in Pointe Coupee Parish, Louisiana. With a limited budget and continuous mounting expenses we strive to maintain a well maintained safe airport for the general aviation flying public. The approval of TIA 1539 would remove the additional burden of increasing the cost to our fueling system, as the fuel farm is operated and maintained by the airport itself.

Respectfully,

Yvonne Chenevert, Director
False River Regional Airport
P. O. Box 97
8662 Airport Spur
New Roads, LA 70760

www.falseriverregionalairport.com

"A mile of highway will take you just one mile.....but a mile of runway will take you anywhere".
Please follow the below link and once you view the TIA it has a link for comments, which is where you may include your comments concerning.

Thank You,

Michael Mattern
Titan Aviation Fuels
Director, Quality Control

To Whom It May Concern:

As airport director of False River Regional Airport, I fully support TIA 1539. I respectfully urge the 407 Technical Committee to approve TIA 1539.

The False River Regional Airport is a rural General Aviation airport located in Pointe Coupee Parish, Louisiana. With a limited budget and continuous mounting expenses we strive to maintain a well maintained safe airport for the general aviation flying public. The approval of TIA 1539 would remove the additional burden of increasing the cost to our fueling system, as the fuel farm is operated and maintained by the airport itself.

Respectfully,
Yvonne Chenevert, Director
False River Regional Airport
P. O. Box 97
8662 Airport Spur
New Roads, LA 70760

www.falseriverregionalairport.com
Good Day to the NFPA and Technical Committee Staff:

I am writing this email in reference to the proposed NATA TIA 1539 and to advise that Wilson Air Center – KCLT is in full support of this proposal.

As the sole FBO and General Aviation service provider on the Charlotte Douglas International Airport, we experienced as much as an 82% reduction in fuel sales at the height of the COVID pandemic in 2020 and are currently at only 50% of our fuel sales from 2019 with no clear indication of a consistent recovery period. Our fuel sales are holding relatively steady at the 50% mark.

The cost to retrofit two fuel farms and 7 fuel trucks with the automatic shutdown systems would be financially detrimental to not only our business but to the many FBO’s that have and are currently experiencing income reductions in their fuel sales due to the COVID-19 pandemic. As you are fully aware, businesses across the country are struggling just to keep their doors open and employees on staff to service our industry. To have this additional cost looming over their heads is likely to put many out of business and cause the loss of many industry jobs.

Thank you in advance for your consideration and please know that Wilson Air Center – KCLT encourages the NFPA to very seriously consider adopting the NATA TIA 1539 proposal.

Respectfully,

Dave Tresaloni
Asst. General Manager
Wilson Air Center – KCLT
5400 Airport Drive
Charlotte, NC 28208
To the Technical Committee overseeing NFPA 407:

We at Torrington Municipal Airport (KTOR), a full service purveyor of Aviation fuel, want to weigh in on the proposed changes to the National Fire Protection Code. These proposed changes will demand that we upgrade our equipment by June of 2021 at an estimated expense of 6 to 10,000 dollars. We are in favor of the proposed amendment to NFPA 407 which is TIA 1539. This amendment allows current operating systems to not have to upgrade to the automatic shutdown equipment.

Regards,

Michael Richey
Torrington Airport Manger
Good Afternoon, my name is Chris Holden. I have been employed by Holman Enterprises DBA Glacier Jet Center for 21 years. Currently Glacier Jet Center operates 9 fuel trucks and 4 loading racks at our fuel farm. All of our trucks have operating prechecks to prevent overflow. The cost associated with meeting the new requirements of NFPA 407 by June 2021 would have negative impacts on our Business as well as the Aviation Industry as a whole. It goes without saying that COVID-19 has crippled our industry. Currently our business alone is down 60% on airline fuel. Our focus is, has always been, and will continue to be operating at the highest level of safety. We just don’t need an additional financial burden to contend with.

I would like to express our support of TIA 1539.

Chris Holden
Line Manager
Glacier Jet Center
Kalispell MT 59901
Foran, Rosanne

From: Reed Pigman
Sent: Friday, October 16, 2020 1:09 PM
To: Shared TIAs
Cc: sberry@nata.aero
Subject: Support TIA 1539

407 Technical Committee
National Fire Protection Association

I urge your support of TIA 1539, which would amend the 407 requirement that FBOs install “skully type” automatic shutdown systems on fuel farms and mobile refuelers. TIA 1539 would limit this requirement to new fuel farms and new mobile refuelers only.

Texas Jet has been an FBO on Fort Worth Meacham International Airport (KFTW) for 42 years. We operate four (4) fuel farms and ten (10) mobile refuelers, so our cost of retrofitting would be considerable. In addition, all our tank farms and mobile refuelers have high level shutoffs and all loading/offloading is done in containment areas. To add this very expensive, tertiary redundancy requirement is excessive and unwarranted.

Thank you,

Reed Pigman, Jr.
President

#1 INDEPENDENT U.S. FBO
2016 * 2017 * 2018 AND 2020!
Professional Pilot Magazine

200 Texas Way
Fort Worth, TX 76106
Foran, Rosanne

From: Joe Crawford
Sent: Friday, October 16, 2020 1:46 PM
To: Shared TIAs
Subject: TIA 1539

407 Technical Committee
National Fire Protection Association

I urge your support of TIA 1539, which would amend the 407 requirement that FBOs install “skully type” automatic shutdown systems on fuel farms and mobile refuelers. TIA 1539 would limit this requirement to new fuel farms and new mobile refuelers only.

Abilene Aero has been an FBO on Abilene Regional (ABI) for 52 years. We operate two (2) fuel farms and seven (7) mobile refuelers, so our cost of retrofitting would be considerable. In addition, all our tank farms and mobile refuelers have high level shutoffs and all loading/offloading is done in containment areas. To add this very expensive, tertiary redundancy requirement is excessive and unwarranted.

Thank you,

Joe Crawford
President
Abilene Aero – Lubbock Aero
2850 Airport Blvd.
Abilene TX 79602

Abileneaero.com
Lubbockaero.com

Providing Excellence In Aviation
I urge your support of TIA 1539, which would amend the 407 requirement that FBOs install “skully type” automatic shutdown systems on fuel farms and mobile refuelers. TIA 1539 would limit this requirement to new fuel farms and new mobile refuelers only.

Tri-State Aero, Inc. has been an FBO at Evansville Regional Airport (KEVV) for 57 years. We operate two (2) fuel farms and five (5) mobile refuelers, so our cost of retrofitting would be considerable. In addition, all our tank farms and mobile refuelers have high level shutoffs. To add this very expensive, tertiary redundancy requirement is excessive and unwarranted.

Thank you,

Bo Ballard
VP of Operations

Tri-State Aero
6101 Flightline Drive
Evansville, IN 47725
www.tristateaero.com
Good afternoon,

I write in support of NATA’s TIA 1539. Please favorably consider the proposed TIA. I manage a GA airport that sells approximately 250k gallons of jet/AVGAS a year. Our margins are tight given the already great costs required to safely operate the airport. We currently meet ATA 103 requirements. Please consider the additional expenses placed on sponsors/operators when voting to require that certain NFPA 407 requirements be mandated retroactively.

Thank you,

Scott Hinton
Airport Manager

www.ecgairport.com

ELIZABETH CITY REGIONAL AIRPORT
Please approve the NATA's Tentative Interim Amendment (TIA) – TIA 1539 -- which removes the retroactive nature of the current language in the NFPA 407, applying it to only new fuel farm/fuel truck installations. We at the Wellsboro-Johnston Airport cannot afford the retrofit originally proposed for NFPA 407 and are having enough revenue problems as it is with the current pandemic and the general decline of General Aviation in the U.S.

Thank you,
Shaw Siglin
Grand Canyon Airport Authority

Wellsboro, PA
To whom it may concern,

I am concerned with the proposed "scully type" system that is being addressed for FBO owners in our nation. This system will be a financial burden to operators already dealing with the loss of income due to the Chinese Virus. The safety with fueling falls on the individuals operating the fuel farms and refuelers. We all have to complete training in the operation of fueling and fire safety. If there have been situations where fuel has been greatly spilt or a fire resulted in the wrongful way fueling was performed, falls on the individual not following safety procedures and have the lack of supervision. Why should ALL FBOs be penalized for the mistakes of a few. The automatic shut offs will be bypassed by those same individuals who have no regard for safety.

There are already shut off means installed on fueling by single point or by nozzles. These means all work the way they are designed when used properly. So, no matter what devices are mandated to be installed there will always be accidents. It just the way of our world. No one is perfect. I ask that the proposed systems not be mandated to be installed since they are redundant. Seems someone has financial interest in the companies that will produce the systems but rely on certain individuals of the NFPA to pass a law that will result in hardships for those FBO owners who do what is proper. As they say, follow the money trail and you will find the reason for the change. Someone always gains at the expense of others. (i.e. we are mandated to where masks and use sanitizer but where are the products made.....China. Who gained from this situation?)
We support TIA 1539. The cost of retrofitting our fuel system will probably force our small airport to stop selling AVGAS as lead to the eventual closing of our airport, Belle Plaine Municipal in Iowa.
Good morning,

I’m emailing today to comment that I fully support TIA 1539. My name is Mike Bambrick, I’m the Assistant Manager of the Cincinnati Jet Center. Part of my job responsibilities is to oversee and verify that quality control standards are upheld to the highest possible degree. The NFPA 407 requirement for loading racks and vehicles to be retrofitted with automatic shut down has caused issues with our operation. Firstly, us and our contracted fuel farm technical expert have yet to find a respectable company manufacturing a retrofit kit to satisfy the verbiage of NFPA 407. Only during our most recent fuel audit from Titan Aviation this past September did we learn about “scully”. In addition, that one section of NFPA 407 with a due date of 2021 cost us a perfect score on my fuel audit this year due to the fact that no one is making these kits. Fuel farms and refuel vehicles have to be attended during transfer operations, no exceptions. This change to NFPA 407 is only going to cost us unnecessary financial hardship with zero benefit to safety of personnel or the environment. We are a small company of ten employees, not a large outfit with excess funds to throw around. TIA 1539 is fully supported by us at Cincinnati Jet Center and I strongly urge you to put this amendment to work so that us and every small FBO can be granted financial relief from NFPA 407.

Mike Bambrick
Assistant Manager
Cincinnati Jet Center
Butler County Regional Airport (HAO)
2820 Bobmeyer Road
Hamilton, OH 45015
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I encourage committee to approve TIA 1539 Darrell Mink KMA aviation

Sent from my iPhone
Attached please find the letter of support from the Michigan Association of Airport Executives. If you have any questions, please contact me.

Ms. Shawn Jezak
Executive Director
Date: October 15, 2020

From: Michigan Association of Airport Executives – Board of Directors (MAAE)

To: National Fire Protection Association – 407 Technical Committee (NFPA)

Re: NFPA 407 - Standard for Aircraft Fuel Servicing
    Letter of Support for pending Tentative Interim Amendment 1539 (TIA 1539)

Michigan Association of Airport Executives (MAAE) is the primary professional organization in support of Airport Executives, Airport Board Officials, Airport Employees, Aviation Service Consultants, Aviation Vendors and Suppliers across the State of Michigan. A primary goal of MAAE is to assist members with fulfilling their responsibilities to the airports and communities they serve. In support of those efforts, the MAAE Board of Directors is charged with analyzing proposed legislation and pending regulatory agency mandates that will impact MAAE members and their airport operations.

Members of the MAAE Board have evaluated sections 5.1.12.1 - 5.1.12.4 of the 2017 NFPA 407 mandates and proposed wording for the 2022 edition. Likewise, MAAE Board Members have also evaluated the responding Tentative Interim Amendment (TIA 1539) that has been submitted on behalf of National Aviation Transportation Association (NATA). As a result, it is recognized that proposed TIA 1539 will specifically provide necessary relief to hundreds of General Aviation Airports and FBOs from an excessive burden associated with retrofitting existing fuel farms and mobile refuelers with automatic shutdown systems.

**In short, this letter is submitted to encourage members of NFPA 407 Technical Committee to approve TIA 1539.**

Sincerely,

Gary W. Kellan
President"
Foran, Rosanne

From: Bob McCreery
Sent: Monday, October 19, 2020 10:01 AM
To: Shared TIAs
Subject: NFPA 407 Comment

407 Technical Committee
National Fire Protection Association

I urge your support of TIA 1539, which would amend the 407 requirement that FBOs install “skully type” automatic shutdown systems on fuel farms and mobile refuelers. TIA 1539 would limit this requirement to new fuel farms and new mobile refuelers only.

McCreery Aviation Co., Inc. is a FBO/fuel supplier at the McAllen International Airport in McAllen, Texas, we have survived for the last 73 years. Our small company operates 6 aircraft refuelers and 2 fuel farms which would be a costly retrofit to our equipment. Our mobile refuelers and fuel farms have high level shutoffs and all loading/offloading is done in containment areas, to add this very expensive, tertiary redundancy requirement would be excessive and unwarranted.

Bob McCreery
President
McCreery Aviation Co.
McAllen TX

IS-BAH Certified FBO – Stage 2
To whom it May Concern,

In regards to the Proposed TIA 1539 that provides relief to general aviation airports and FBOs from the requirement that they retrofit their fuel farms and mobile refuelers with automatic shutdown systems. We here at Flight Level Aviation Cape May strongly support this relief bill. As the cost of a mandatory installation of a system for a location as small as us would be severe and significantly impact us and our ability to maintain operations in a location that is a seasonal at best. Our current standards of quality control and refueling procedures are strict and followed with zero tolerance to any deviation. As any incident would prove to be just as costly. Please support the FBO community and enact this change.

Thank You,

Larry ‘Chip’ Chiappelli  
Station Manager  
FlightLevel Aviation Cape May  
375 Forrestal Rd Rio Grande, NJ
Dear Technical Committee,

NATA’s proposed TIA removes the retroactive nature of the current language in the NFPA 407, applying it to only new fuel farm/fuel truck installations. Without the change proposed in the NATA TIA, airports and FBOs would be faced with a $6,000-$10,000 bill per fuel farm loading rack, and $2,500-$3,500 bill per fuel truck, with all equipment needing to be retrofitted by June of 2021.

This places an extensive burden on our industry. While these systems are valued and our company has personally invested in these systems at locations that have upgraded to new fuel facilities. We also have existing fuel facilities and fuel service mobile equipment that is in good serviceable condition that would require extensive investment to bring the entire fleet up to this requirement.

We take fuel spill avoidance seriously. We currently have active measures that have provided for overfill avoidance at all of our locations with great success.

We at Lynx FBO Network clearly support TIA 1539. We encourage the technical committee to approve this TIA. Lynx FBO Network is a small network of Fixed Based Operations that provides fuel services to the General Aviation community at 8 locations across the United States. My personal contact information is included with my signature.

Thank you for your consideration,

Joe West
Vice President of Safety
2450 Louisiana Street
Suite 400, #516
Houston, TX 77006

www.lynxfbo.com

Now in Destin, FL (DTS), Fort Lauderdale, FL (FXE), Little Rock, AR (LIT), Minneapolis, MN (ANE), Morristown, NJ (MMU), Napa, CA (APC), Portland, OR (UAO), and Pittsburgh, PA (AGC)

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.

Please consider the environment before printing this email.
My name is Guillermo Escobar, Line Services Supervisor at GlobalSelect – Sugar Land Regional Airport. I have 39 years of aviation experience. Currently, my focus is in quality control and assisting the Line Superintendent with maintaining the fuel farm.

The Sugar Land Regional Airport is designated as one of the 89 National Airports in the country and one of eight in the State of Texas. The Airport supports the national and state system by providing communities with access to national and international markets. Without TIA 1539 the cost of the improvements will have a significant impact financially. Due to COVID, we have had to implement reductions in our O&M expenses to help alleviate the loss in revenue.

Sugar Land Regional Airport built the current fuel farm in 2000 and have made several safety enhancements. We installed a secondary pump shut down system with the pump timer. We have a high level shut off on each tank. We check this monthly for proper operation, dead man control, and emergency stops for both topping fuel trucks and transports. The pumps on the fuel farm shut off after 45 minutes of use; most fuel truck top offs and transport deliveries are about 40 minutes. In addition, all of our fuel trucks are set up with a high level shut off that are tested every time the truck is top offed. Lastly, we train all line crew personnel on fuel farm safety procedures. We take safety seriously and want to ensure everyone understands and feels comfortable handling fuel related tasks.

We support TIA 1539 and encourage the technical committee to approve the TIA 1539.

Thanks,

Guillermo Escobar
1th. Shift Supervisor
Global Select /Sugar Land regional Airport, Texas
Good morning,

With respect to the above and its possible integration to NFPA 407 Standard, I would like to comment as follows:-

The integration of TIA 1539 by the National Fire Protection Association would greatly help the North Atlantic Air, Inc. at the Beverly Regional Airport. (KBVY) Like most small airports the FBO self supports and has no ways of receiving grants for capital costs but must rely on our own to fund.

We currently have one "Jet" loading rack supporting two (2) AST 10,000 gallon tanks. Our Avgas has one (1) loading rack supporting one (1) 8000 gallon UST. North Atlantic Air currently has a fleet of two (2) 3000 gallon Jet trucks and one (1) 1000 gallon avgas and one (1) 500 gallon avgas Bowzer.

Both fuel farms are inspected each year and signed off by the respective Fire Departments as complying with the NFPA-407. Further to this we have an annual fuel farm inspection and training with our supplier further strengthening commitment to fuel & farm safety.

The cost for North Atlantic Air to install the Automatic Shutdown Systems comes at a time when Covid-19 is prevalent, lack of airplane traffic which makes a capital cost very, very challenging. The FBO community is relatively small and in speaking to some of my counterparts at GA Airports they like North Atlantic Air are "cash strapped and running slow".

I would fully support the TIA 1539 in its entirety and respectfully request the NFPA Technical Committee to approve TIA 1539 in applying it to------ only new Fuel Farms and new Fuel Trucks installations.

Regards,

John Messenger
President/COO
Good Morning,

My name is Kyle Quinn. I am the General Manager for Modern Aviation in Denver. Modern Aviation is a small FBO chain and growing, currently operating in Wilmington, Denver and Seattle. We are in support of TIA 1539 that was proposed to amend NFPA 407. Thank you.

Best,

Kyle Quinn
General Manager
Modern Aviation – Denver KAPA
Good afternoon,

I totally agree with everything Steve Berry, National Air Transportation Association, has written about NFPA 407-2017 and Proposed 2022 Editions. The proposed TIA 1539 provides relief to hundreds of general aviation airports and FBOs from the requirement that they retrofit their fuel farms and mobile refuelers with automatic shutdown systems (aka: “scully type” systems). NATA’s proposed TIA removes the retroactive nature of the current language in the NFPA 407, applying it to only new fuel farm/fuel truck installations. Without the change proposed in the NATA TIA, airports and FBOs would be faced with a $6,000-$10,000 bill per fuel farm loading rack, and $2,500-$3,500 bill per fuel truck, with all equipment needing to be retrofitted by June of 2021.

The logistics required to retrofit all existing equipment across the industry are very difficult to contend with during “normal” conditions but are compounded with the current worldwide crises. While many locations own their refueling equipment many more are provided by aviation fuel distributors through lease programs or other arrangements. The leased fleet in the United States is in the thousands and mobile refuelers are moved throughout the country from airport to airport providing the resources to keep America flying. The ability to procure enough components as well as contractor resources to logistically retro fit so many airport fuel storage facilities and existing refueler trucks during these very unstable times will be extremely difficult if not impossible to do.

Removing the retroactivity statement would allow the industry to progress toward meeting the requirement when new fuel storage systems are being designed/constructed. This type of flexibility and time frame allows the industry to procure the components as well as contractors at a reasonable pace both logistically and financially. I support the TIA removing the existing retroactive language in section 5 specifically 5.1.12.4: This would change 5.1.12.4 to read: New loading systems shall comply with 5.1.12.1 through 5.1.12.3.

I work for the Charlotte County Airport Authority as the FBO manager at the Punta Gorda Airport. We are located in southwest Florida between two hub airports in Ft. Myers and Tampa.

Thank you,
Keith Hafenbreidel

Keith Hafenbreidel | FBO Manager
We at McKinley Air Inc. support the TIA 1539 that would provide relief from the requirement to retrofit our small fuel farm and trucks to the Scully type system. This would create a financial hardship in an already tough economy from the Covid 19 slowdown. Please reconsider making it mandatory to install this system to our equipment by June 2021.

Thanks!

Ray Courtwright

Toll Free: 800.225.6446
www.mckinleyair.com

Aviation Services Since 1934
Hello,

This email is to provide clear indication that Adirondack Flying Service supports TIA 1539 and we encourage the technical committee to approve the TIA.

We are a 135 and FBO Operator in Northern NY and this would add an additional cost to the Town of North Elba, the airport sponsor, to retrofit our old fuel farm equipment. At this time we are already negatively impacted by COVID-19 and do not need any additional imposed financial liabilities.

Please do not hesitate to reach out should you have any additional questions.

Warmly,

Loretta Buerkle

27 Airport Lane
Lake Placid, NY 12946
Hello

I 100% support the TIA 1539 Amendment and would strongly suggest the Committee approve this to help keep the smaller airports and fbo’s a float and in business. Its unfortunately hard enough to keep small airports going with some of the regulations that are currently in place but to add to it with the scullly system and similar shutdown system it is going to close down a lot of locations and hurt the industry as a whole. I can see the need for this at jfk, lax, dfw, ord but a location like KRKD, KBHB, KDCU which are smaller in comparison to those major airports would feel the impact from this. I work for a company that is owned by two hard working individuals that really take care of its employees which is rare and is becoming more rare in this industry. We currently have three locations KGON, KBHB, KRUT which are all seasonal locations with the exception of KGON which sees more traffic due to the casinos, General Dynamics, Naval base as well as the coast guard base. The shutdown system has been a huge topic and concern within our company due to the fact that our smaller locations don’t generate the additional revenue to be able to have these system’s installed and be able to stay afloat during the dead season of these locations. With that being said I hope the committee strongly considers this amendment for further review. Thank you

Edwin Rosado
Line Operations Manager
Mystic Jet Center
175 Tower Ave
Groton, CT 06340
On behalf of all our GA airports in South Carolina, I would like to recommend you approve the TIA 1539.

Jules Grosjean
Senior Linesman
Oconee County Airport
I am writing this message in my support of the proposed TIA 1539, and would highly encourage the technical committee to approve it as well. I am the operations supervisor for the Pellston Regional Airport. We are a small county owned Part 139 airport with a very limited budget, and completely understand the need for progressive safety measures in the fueling industry. However, I do feel making this retroactive would not just place a financial burden on our airport, but so many other airports as well who have all complied with the current codes at the time of construction/installation. Thank you for your time.

Jeff Mallory
PLN ARFF INC
Pellston Regional Airport
National Fire Protection Agency

October 20, 2020

To Whom it may concern regarding NFPA 407-2017/2022,

My name is Michael Magni and I am the president of Monaco Air Duluth, a Fixed Based Operator in northern Minnesota. Our FBO has approximately 30 employees and provides Airline, Cargo, GA and Military fueling operations at Duluth International Airport. Our fuel service equipment includes approximately seven above ground tanks in our fuel farm, a self-serve fueling station and 9 fuel trucks. Our FBO is one of the countless airport fuel service businesses in the United States that would be severely impacted by the proposed changes to NFPA 407-2017/2022.

If the changes are approved without amendment, the new requirements would require a substantial cost to retrofit our fueling equipment at a time when our business revenue and projections for the near future are off substantially. Therefore we fully support and encourage the NFPA to consider the amendments put forth in TIA 1539 as they relate to NFPA 407-2017/2022.

Thank you,

Mike

Michael Magni
President
Monaco Air Duluth
October 20, 2020

To whom It May Concern,

American Aviation has been in the fueling business for 42 years. We currently are an Avfuel dealer and hold a DESC contract. The expense of the is not worth the expected result. This system is very costly for our small FBO to afford. We fully support the TIA 1539 and strongly encourage the committee to approve the TIA 1539. If you would like to contact me to discuss this matter I would be happy to do so.

Thank you,

Jennifer Torraco
To Whom it may concern,

My name is David Parker, Administrative Director for Executive Air in GRB. Executive Air is a small family owned FBO in Green Bay, Wisconsin. We support TIA 1539 and encourage the technical committee to approve this TIA. This proposed change to NFPA 407 would cause an undue burden on Executive Air, especially during this pandemic season where all profits have disappeared. We ask you, along with thousands of other FBOs across the country, to limit this proposed change to new equipment only.

Thank you for your consideration.

Sincerely,

David Parker | Executive Air
Administrative Director

www.executiveair.com
We at the Council Bluffs Municipal Airport are in support of TIA 1539 and encourage the technical committee to approve the TIA. We are a General Aviation Reliever Airport located outside of Omaha, Nebraska. At our airport the Airport Authority manages and controls the airport and the hangars, while the Fixed Base Operator handles the commercial services side of the airport.

Andy Biller  
Executive Director  
Council Bluffs Airport Authority  
101 McCandless Lane  
Council Bluffs, IA 51503

e-mail to tias_errata_fis@nfpa.org
We urge you to consider NATAs TIA for changes to NFPA 407

We support TIA 1539 and strongly encourage the technical committee to approve the amendment.

This requirement is financially prohibitive for small businesses.

We are owners of a small FBO at a small airport

Thank you,

Keith and Janace Harbour
Avcraft, Inc.
Columbus, NE 68601
Foran, Rosanne

From: matt
Sent: Tuesday, October 20, 2020 4:41 PM
To: Shared TIAs
Subject: TIA 1539

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon,

This is in support of the proposed TIA 1539 and encourage the technical committee to approve. 5B Aviation has already spent over $10,000 in updating our fuel farm/truck filter/water defense system along with normal fuel truck maintenance so the additional expense would be burdensome. We appreciate your help.

Thank you,

Matt Robinson

5B Aviation, LLC
2700 S 13th St
Duncan, OK 73533
To whom it may concern. My name is Gary Peacock and I am the VP of Warren Aviation. My company currently holds the contract to operate the FBO at KHRJ in NC. Our company along with Harnett County have been hit very hard with the COVID 19 virus effects and financially cannot bare the cost for this retrofit at this time. I am writing to let you know that I strongly support the TIA 1539 and encourage the committee to approve it as well.

My Contact Information.
Gary Peacock
VP of New Business Development
Warren Aviation
PO Box 1927
Dunn NC 28335

Sent from Mail for Windows 10
Greetings,

I support TIA 1539 and encourage the technical committee to approve 1539. I am the airport Director at Harnett Regional Jetport, a GA airport in southeastern NC. As the airport director, I am faced with many crisis both small and large. If we are forced to retrofit fueling systems, especially when fuel sales are down and other prices are going up, this will negatively affect how our public airport will meet increased demands in the coming months. I am hopeful that GA will see a resurgence and an increased role for the flying public. However, local governments, who fund the majority of operations and maintenance of small-medium GA airports are already stretched to the limit, especially rural counties such as ours. Retrofitting will add costs to an already stretched condition. I encourage you to approve 1539.

Thanks in advance.

Sincerely

Barry

Barry A. Blevins
Harnett County
General Services / Airport, Director
The Chippewa County International Airport (CIU) in Sault Ste. Marie, Michigan supports TIA 1539, a compromise to NATA’s NFPA 407, allowing airports and FBO’s to prepare for the added expense of scully shutoffs when building a new fuel farm or purchasing/building new fuel trucks.

In order for the FBO to dispense fuel I would assume that all fuel farms and fuel trucks presently have a mechanism by which to shut off the flow of fuel in the event of an emergency, which to my knowledge has worked thus far, and has past all fuel safety inspections. I understand as with most anything technology has something new and improved to make fueling aircraft even more safe. All FBO’s/airports are happy to make these updates, but not if our emergency procedures in place are working, and not until we need to upgrade or purchase new fueling equipment.

And, I might add, especially with Covid 19 still in the forefront; no FBO can afford any additional operational expenses at this time.

Thank you,

Tami Beseau
Airport Manager
CIU
Foran, Rosanne

From: Perrin Blount
Sent: Wednesday, October 21, 2020 8:59 AM
To: Shared TIAs
Subject: Amendment TIA 1539

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Sirs,

Our FBO is struggling to pay employee wages because of the severe loss of revenue caused by Covid-19 shutdowns. The cost to retrofit our Fuel Farm and Fuel Trucks would be detrimental to our business. We would request that the added safety equipment be Grandfathered for now until we can get back on our feet.

Thanks for your consideration,

Perrin Blount
Operations Manager
Regional Jet Center
12344 Tower Drive
Bentonville, AR 72713

Sent from Mail for Windows 10
Please support and Pass TIA 15-39. We are a fixed based operator at a small Part 139 airport. Having to retrofit to these standards would be a tremendous burden for our business. Another thing to consider, is the lack of companies that are capable of retrofitting the existing systems and a supply chain that would struggle to keep up. The current service situation is a 1 week wait for service and then an additional 1 to 2 week wait for parts and repair. The proposed time frame, in my opinion, is unachievable.

Thank you for your time.

Sincerely,
Foran, Rosanne

From: Jacob Kusenberger
Sent: Wednesday, October 21, 2020 1:43 PM
To: Shared TIAs
Cc: Matthews, Matt E.
Subject: TIA - tentative interim amendment - NFPA 407 - TIA 1539

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good day:

*WE STRONGLY SUPPORT THE APPROVAL OF proposed TIA 1539.*

The change to NFPA 407 would be way too costly at this current time.

The expense of ANY additional equipment to both fuel tanks and fuel trucks will hurt a business that is doing everything possible to stay afloat.

With the corona virus still causing havoc in the airline and general aviation industry, this would add financial difficulty in an already financially strained sector of the economy.

As we respect any and all extra safety measures, this is one that is coming that needs to be addressed when the economy can handle this EXTRA expense.

I am in the hopes that this expense can be delayed for several years in the expectation that the air service industry will probably not get back to normal for that period of time.

Thank you for your time and allowing me to give my opinion.

Sincerely,

Jacob Kusenberger
Owner and Manager of PICO Aviation (AV FUELS branded) Del Rio, TX - KDRT
October 21, 2020

Sent via Email: (tias_errata_fis@nfpa.org)

NFPA/407 Technical Committee

Re: Proposed TIA 1539

Dear NFPA /407 Technical Committee,

We write to you in support of the recently proposed TIA 1539 that removes the retroactive installation requirement of “scully type” systems on mobile refuelers and fuel farms.

As a matter of background, Atlantic’s ultimate success is based on our well-established safety culture and environmental stewardship of the local communities where we do business. While we recognize the benefits of “scully type” systems, we also must direct focus on the various engineering and administrative controls currently in place to address the risk of fuel spills and fire hazards associated with transferring fuel to refuelers. That said, we currently enjoy the benefit of scully systems that are installed at numerous locations across our 70-location network, which was part of Atlantic’s company standard prior to the 407 standard that required such installations.

Given the scope of retroactive compliance currently required in the 407 standard, we recognize the evident financial and general procurement challenges presented to operators across the industry. Furthermore, the impact of COVID-19 has created unprecedented economic challenges with maintaining current equipment and facilities along with the on-going efforts to preserve the jobs of thousands of people industry-wide.

We respectfully ask the 407 technical committee to approve TIA 1539 in support of a balanced and methodical approach to the installation of “scully type” systems. As the CEO of Atlantic along with the VP of Risk, Health & Safety, our duty and priority is the safety of our employees, customers, and the environment. We are confident that Atlantic and the rest of the industry can safely operate our refuelers and fuel farms under the proposed TIA 1539.
Respectfully submitted,

Louis T. Pepper  
Chief Executive Officer  
Atlantic Aviation

Todd Smith  
Vice President- Risk, Health & Safety  
Atlantic Aviation

Cc: Tim Bannon Chief Operations Officer  
Clive Lowe, Executive Vice President- Business Development
Good afternoon,

I’m writing you to express my support for TIA 1539 and I encourage the technical committee to approve the TIA.

Hillsboro Aviation is a family owned general aviation company, and we’ve been doing business at HIO for forty years. In my role of FBO manager I oversee our fueling operations and equipment.

Thank you for considering my comments.

Regards,

Danny

Danny Yazzolino
FBO and Facility Manager | Hillsboro Aviation
3845 NE 30th Avenue, Hillsboro, OR 97124
| www.hillsboroaviation.com
To whom it may concern,

NATA submitted a Tentative Interim Amendment (TIA) – TIA 1539 concerning NFPA 407. As the manager of a regional airport in Oklahoma, I can tell you if NFPA 407 cannot be met by this facility nor several others that I am aware of at least for many years. Even if we had the funding, the time line as written is impossibly short. I fully support the TIA 1539.

I worked in large chemical refineries for 35 years before becoming an airport manager and had to deal with Scully systems on railcar and transport truck loading facilities as an operator and eventually as operations manager. The systems were often unreliable and took a lot of maintenance and troubleshooting using special equipment. These systems may be needed at large commercial airports but will put a stranglehold on small town and county run airports. The pandemic has shut-down our sales tax revenue to the point that purchasing and installing these systems in today's economy just can not be afforded. They are cost prohibited for the volume of fuel we sell and would need to be budgeted for years in advance. Please take another look at this from the small general aviation airport point of view. The intent is good but the timing is terrible.

Thanks,

Joe

Joe Schneider
Airport Manager
1301 Air Park Road
Woodward, Ok 73801
Good Afternoon,

As a stakeholder in this decision I would like to state my support of TIA 1539 and encourage the technical committee to approve the TIA. I serve as the airport manager for Columbia Gorge Regional Airport. Failure to approve the TIA will result in substantial financial challenges for our airport and FBO operations.

--
Aryn Rasmussen
Airport Manager
Columbia Gorge Regional Airport
Foran, Rosanne

From: Harrison, Randy J.
Sent: Friday, October 23, 2020 12:32 PM
To: Shared TIAs
Subject: Comment on Proposed TIA 1539 on NFPA 407

Reasons to remove the retroactive requirement as outline in the TIA.
First I feel I need to say a bit about my background as to establish my credibility to my following statements regarding the TIA.

I have been in Aviation for over thirty (30) years. I am a Quality Control specialist in aviation fuels, equipment and safety. I am currently the Quality Assurance Manager for Avfuel Corporation, member of many aviation organizations and currently a committee member on the Energy Institute (EI) subcommittee representing general aviation through NATA. I have written/developed two comprehensive FAA part 139 training programs personally instructing over 4000 students in seminars. I have been involved in engineering and installation of over 125 airport fuel storage facilities and help maintain a fleet of over 800 aviation refuelers worldwide.

Spills related to overfilling refuelers.

The TIA was written with good thought and reasons needed to pass it. That said, I also do agree we do see (in our office/calls) many spills related to overfill of loading refuelers BUT 80-90 % of those we find the systems did not fail, operators overrode the required safety DEADMAN. We find that it’s a training issue as well as negligence. Operators are trained to use the pre-check system and are told “if that works it can’t over fill”. That is an incorrect statement; the system will always have 3-5 gallons a minute flow rate, filling the tank through the ½ in high level sensor. It will shut the main stream of fuel off through the internal valve (belly valve/Fire valve) slowing the fuel storage pump to a crawl. During normal operations the operator would be standing and holding the required deadman and would let go (stopping the fuel) when the main line of fuel stops pumping into the tank. The problems are the operator when not TRAINED correctly gets a false sense of security and “THinks” he could override the deadman and the system will shut off. He then overrides the dead man keeping the system on. We even have video of operators overriding deadmans and walking away to do other tasks or to just get in the cab of the truck as its cold outside. The systems in place work, the training is lacking. We have worked hard over the last few years on this training and we have also seen a reduction in overfills.

A Better Option
Cost of installing the systems as now written is extreme and most airfields have not had issues related to this problem (% of airports having overfilled spills). A better more cost effective fix would be a deadman timer. The timer installed on the deadman would have to be released and reactivated every 20-30 seconds keeping it from being manually overridden. Very minimal in costs comparatively speaking to the current written requirement and it has been proven to work on refuelers as well.

General
I take safety very seriously as I am sure all the members of the NFPA do. We do need to seek a balance of need and this action that is currently going to be required inputs to much of a hardship on the industry while truly not correcting the ultimate issue. Minimally the requirement if it stays as currently written needs to be gradually inputted with new build systems only. Please vote to remove the retroactivity requirement and pass the TIA.

Respectfully,

Randy Harrison
Quality Assurance Manager
P.O. Box 1387
Ann Arbor, MI 48106-1387
www.avfuel.com
Good morning,

As the General Manager of two FBO facilities in Indiana that have major fueling, flight school, and maintenance functions the impact of TIA 1539 is very important to us. We strongly encourage the technical committee to approve the TIA and want to ensure you know our organization supports its approval.
Foran, Rosanne

From: Ryan Bartman
Sent: Tuesday, October 27, 2020 10:43 AM
To: Shared TIAs
Subject: NFPA 407 support proposed TIA 1539

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

407 Technical Committee
National Fire Protection Association

Our staff respectfully requests your support of TIA 1539, which would amend the 407 requirement that Fixed Base Operators, (FBOs), install “skully type” automatic shutdown systems on fuel farms and mobile refuelers. TIA 1539 would limit this requirement to new fuel farms and new mobile refuelers only.

Banyan Air Service is an FBO that has been operating for 41 years at Fort Lauderdale Executive Airport (FXE). We currently have 2 loading stations and 10 aircraft refueling trucks that would require modifications to accommodate a “skully type” automatic shutdown system. The upgrades to the refueling trucks and fuel farm would cost $50-60k and does not add any safety feature that we don’t already have. Banyan’s fuel farm and refuelers are all equipped with high level shutoffs and all loading/offloading is done in a containment area. The new requirements would be redundant, objectionable and very expensive.

Thank you,
Don

Don Campion
Banyan Air Service
President

________________________________________

Fort Lauderdale Executive Airport (FXE)
5360 NW 20 Terrace Ft. Lauderdale FL 33309
Hello, my name is Sean Ferguson; I'm the Line Service Manager with Leading Edge Jet Center in Redmond, OR. We are a Fixed Base Operator serving the aviation community in Central Oregon. Myself and my General Manager would like to express our support for TIA 1539, and we would like to encourage the technical committee’s approval of this amendment for the benefit of FBOs and other fuel handling companies everywhere. The COVID-19 pandemic has drastically altered aviation in many parts of the country and the NFPA 407 requirement, as it stands right now, could severely impact numerous aircraft and fuel handlers that have already taken a hit from the pandemic.

Sincerely,

Sean Ferguson
Line Service Manager
Leading Edge Jet Center, LLC
1050 SE Sisters Avenue
Redmond, Oregon 97756

www.leadingedgejet.com
To whom it may concern:

Of the 19,570 airports in the US, 14,168 are designated as private use and 5,119 are designated as public use. Of the 5,119 public use airports, only 10.2% (521 airports) make up the FAA 139 certificated airports. Of those 521 airports, less than 20% (104 airports) currently comply with the requirements of NFPA 407 as it is written. That leaves approximately 417 airports spending approximately $8000.00 per loading rack. Some of these airports have more than one farm, but if we assume a minimum of at least 1 jet skid, and 1 avgas skid on each of the 417 airports that is an expenditure of $6,672,000.00.

The remaining 90% of public use airports (4,598 of them) are non-certificated airports which comprise the bulk of the General Aviation market. Many of these airports have accepted grant money through the FAA and under their AIP grant program requirements these airports can be held to and inspected to the same standards. That is potentially another 73 million dollars in fuel farm modifications to meet the requirements as written and we haven’t even touched on all of the refueling trucks that will require modification to be compatible with the storage systems.

At Avfuel we maintain a fleet of 860 vehicles that would require modification to be compatible with one or the other of the popular shutdown systems currently on the market. Since the majority of our trucks are positioned with customers in the field, it would require field modifications at a cost of approximately $3K per unit for parts and labor. For our company alone that is an expenditure of $2,580,000.00, and we are but one of several companies in the same predicament.

I realize we have had 4 years to comply with the retroactivity clause, but I personally would like to see NFPA council make available to the public the study and or statistical data in justification of the requirements of 5.1.12 of NFPA 407 2017 edition. I am an advocate for safety, but can we all agree that there are alternative methods that are more cost effective and achieve the same fire safety and environmental protections desired without the financial burden imposed as the regulation is written?

I fully support the proposed TIA log 1539 and the redactions written therein and urge the voting members of the 407 committee to do so as well.

I have been in this industry for 34 years, 14 years with Allied Aviation at DFW airport, 6 years with American Airlines Fuel Engineering group, 4 years with Carter Ground Fueling, and 10 years with Avfuel’s QA department. I have twice been a past voting member of NFPA 407 during my tenure with American Airlines and my tenure with Carter (Eaton), I was chairperson of ATA 103 for multiple revision cycles.

Regards,

Victoria D. Loy

Victoria D. Loy
Quality Assurance Representative
110 East Ellsworth
Ann Arbor, MI 48108
Foran, Rosanne

From: Sommer, Lee
Sent: Friday, October 30, 2020 8:25 AM
To: Shared TIAs
Subject: NFPA 407 TIA 1539

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Please approve/adopt the TIA 1539

We are a small GA airport in the state of Maryland. Not only are we in the Flight Restriction Zone (FRZ) the most highly secured airspace in the United States after 911, but also like many others suffering under transportation limitation during Covid-19. Retrofitting our fuel farm and truck would be a devastation financial burden. Imposing on new equipment, going forward, would make sense. Please grand-father in existing.

Lee (LeRoy) Sommer
Airport Manager
M-NCPPC
Department of Parks and Recreation
Natural and Historical Resources Division
College Park Airport, Manager
1909 Corporal Frank Scott Dr.
College Park MD 20740
I am the Executive Director of Sebring Regional Airport in Sebring FL (KSEF). We also operate the Fixed Base Operation (FBO). Our fixed storage tanks at the airport and bombing range are **not** setup with the automatic shutdown system, i.e., know as Scully. We have the standard industry manual shutdown system, whereby you have a deadman when the trucks are loading. The Scully system are electric probes normally used at large commercial storage terminals that load transport trucks, barges, etc. Most General Aviation FBOs do not have this system. To implement, it would be costly to the industry. All tanks and refuelers would have to be retro fitted with the Scully probes. Airports where commercial airline service and high volumes of fuel is flowing is generally setup in this manner, i.e., MIA, FLL, RSW, TPA, MCO, etc. The commercial refuelers are generally 7,000 – 10,000 gallons in size and filling at 600 GPM.

We oppose the change to NFPA and support the TIA proposed by NATA.

**Mike Willingham**  
Executive Director  
Sebring Airport Authority / 128 Authority Lane / Sebring FL 33870
I am writing to express my support for the proposed Tentative Interim Amendment 1539 as presented by the National Air Transportation Association. Retrofitting our existing fuel farm and mobile refuelers with automatic shutdown systems would be a very expensive undertaking for our county run airport and FBO.

Valley County took over the management of the airport and the FBO at the end of 2013. Since then, considerable resources have been spent to update the airport's fuel facilities, including a completely new above ground fuel farm. Within the last few years, the airport has finally become able to self-fund its regular operations, this is largely due to the income generated from refueling operations. We provide services to an essential air service airline and a very busy air medevac company and while the Valley County Airport is not currently a part 139 certificated airport, we make every effort to run a safe and efficient operation. If we were to have to cover the cost of the automatic shutdown system, estimated to be $17,000 to $25,000, it would put considerable strain on the county budget to once again "help out the airport". It would certainly be more practical for us to phase in the new systems as new equipment, i.e. refuelers, are purchased.

Thank you,

Lucas Locke
Airport Manager
Wokal Field
Valley County Airport
Glasgow, Montana
To whom it may concern,

To require general aviation airports and FBO’s to install a scully type automatic shutdown system in mobile refuelers and fuel farms would be a hardship for most, if not all effected. With most general aviation airports and FBO’s just starting to return to somewhat normal traffic due COVID 19 shutdowns and lack of operations, the cost of said units would be a hard monetary hit and down time of equipment. These systems are not in anyone’s budgets. Cuts would have to be used in other maintenance and repairs or programs, leaving these programs vulnerable to failure or improper servicing and safety. With a possible hit of $45000.00 to our facilities and fuel trucks it would be a major hurdle to complete the retrofit.

Including the change to require a scully type/automatic shutdown system in new construction of fuel farms and mobile refuelers would benefit all. Funds could be included in budgets and more efficient planning could be done. New fuel trucks and fuel farms could be fitted with the systems as they are built. General aviation airports and FBO’s could and should look at their SOP’s of refueling procedures and the shutdown systems already in place. We as a general aviation airport support TIA 1539 100%.

Respectfully

David Yates
Good Morning,

My name is Steve Daquilla, General Manager of Avflight Columbus located at the GTR Airport. I am typing this letter to support the proposed TIA 1539 due to the fact that our company has had a very down year due to the Coronavirus and could be in a recovery period for a while.

Thank You Kindly

Steve Daquilla
General Manager

Avflight Columbus Corporation
Golden Triangle Region Airport (KGTR)
COVID-19 Resources for You | feedback
My name is Alejandro Membreno. I am the Line Service Manager, and current also the Co-Safety Officer. A numerous amount of questions arise when such proposal come into play. What is going on in the industry? How often does this instance occur that requires additional checks? Is this the “IT” solution from here on to forever or will someone come up with a better system and will cause all to replace to the new system? How about what is going on financially in the current economy? How far into the projection of current circumstance will companies, FBO’s, Airports, distributors, etc. recover to afford such financial burden? Data analysis, trends, real time facts and other such information is required for me before accepting what the new normal is going to be. Delaying such move is my vote. Who in the NFPA made the decision that July 2021 is great idea? Are they on the field and visually reporting such information that they strongly feel like this is the ultimate solution? Don’t get me wrong, I am a firm believer of safety and prevention of accidents, but lets look into what is causing the accidents. Is it lack of training? Lack or funding for newer components? Laziness/ complacency? That data should be analyzed over and over and exhaust such solutions. This is why the Safety Management System was created to review this kind of data internal to correct deficiencies. Jumping into the Scully system. It is a wonderful system, it works, no doubt about it that it will do its job but I have been in the industry long enough to know that some FBOs/ airports do not need such capacity of such system. With so many regulations currently existing new tanks need what? High level sensors? Floating suction? Additional monitoring systems such as TCS, Veeter Root products that also help with controls and determine capacities, assist with shut off controls and fuel trucks are also made with high level shut off and others with a double style feature that is also a redundancy. Did I mention the additional components the additional competing systems that also help assist this redundancy? What I am trying to say NFPA is this. Delay this notion, rethink this on another date, time frame, year (realistically) and get a vote. For those who do not have any sort of safety measures, who think any safety equipment is too much, not required, those are your target audience, moving forward to the future! Those who are trying to build, want to start up, those are your target audience, just like phasing out black steel and only allowing stainless steel for piping is regulation when fixing, starting new, etc. same concept. Same concept of delaying monitor system filters because of the faults in the system and phasing out several years in advance to allow companies to financially prepare and business preparation where it would cause less friction and minimal revenue loss “PHASING OUT STUFF” use that same concept. I do several things here. I have created many polices, standard operating procedures, and continue to monitor safety. I started as a linen, I still work with my linen and hold an office position. My judgement is based on my experience both past and current. I am not just an officer personnel creating new policies and procedures. My procedures have validity behind it. I vote with NATA to delay such notion because it does not make sense to force everyone to do this so soon. Especially with everything going on in our nation. Yes, things are always going, someone is always doing something wrong, accidents are constantly happening, etc. All I am saying is think about this really hard before jumping the gun. As a Marine Combat Veteran every decision was planned out and yes hasty changes were made during mission in Afghanistan but it the risk factor was used to cause minimal casualties for our Marines,/ troops. Consider the delay and re-convene on this decision. Offer a later date/ year, offer a different proposal. Give the business owners an opportunity to financially prepare for this. Give the business owner an opportunity to prepare business wise.

Alex Membreno
Line Service Manager
(USMC vet/ 6113 flight line mechanic/ OEF 2011)
11 years of aviation experience: mechanic, Safety, Collateral duty inspector, Quality Assurance Rep./ Line Service Manager/ Co-Safety Officer
Delaware Aviation Advisory council
Henry "Chick" Chinski (Chair)
Delaware Department of Transportation (DelDOT)
800 S Bay Rd, Dover, DE 19901

NFP A 407-2017 and Proposed 2022 Editions
Standard for Aircraft Fuel Servicing
TIA Log No.: 1539

Reference: 5.1.12.

It has come to our attention, that the above-mentioned rule change and requirement would prove to be an undue hardship, on many if not all of our airport operators & FBO's (fixed Based Operators) in the State of Delaware. We feel that a better solution to what appears to be a virtually non-existent issue, would be to only require this change when necessary to replace existing fuel relate equipment with these devices, when upgrades need to be made in the future.

After discussions with many of our airport operators and airport related business related to fueling matters, the following has been determined.

To convert their systems over to the interlock type, the expense would be we have determined to average $20,000. + for each GA Airport & FBO. Given the state of our country's Aviation Industry at this time, this will only be another financial burden on our industry.

This is why we are asking for a TIA removing the existing retroactive language in section 5 specifically 5.1.12.4: This would change 5.1.12.4 to read: New loading systems shall comply with 5.1.12.1 through 5.1.12.3.

H. chick Chinski
Chair Delaware Aviation Advisory council (DOT)
Hello,

I wholly support TIA 1539 and would like the technical committee to approve the TIA. Miles City Airport is a small Municipality owned airport. This if not passed would be a huge undue burden on a small general aviation airport. I feel that our quality control record would show that retrofitting is totally unnecessary. Please consider passing TIA 1539.

Jeff Langkau
Airport Manager
Miles City Airport

mcairport@midrivers.com
www.milescitymtairport.com
From: Tony Mateer  
Sent: Tuesday, November 3, 2020 4:57 PM  
To: Shared TIAs  
Subject: TIA 1539

As a General Aviation Fuel provider we support TIA 1539.

Tony Mateer  
KCAC Aviation | Director of Operations  
Johnson County Executive Airport (OJC)  
15325 South Pflumm | Olathe, KS 66062  
| www.kcac.com

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To Whom it may concern,

I would like to note my support for Proposed TIA 1539. Although KDPA is not a certified part 139 airport we make efforts to meet the requirements of a 139 airport. This requirement would be extremely difficult to achieve by the deadline as noted in the current edition of NFPA 407. Our fuel farm consists of 5 tanks each with its own pump and dead man system. It is my understand that I would be required to retrofit all 5 of these systems as if they were a separate loading system.

Thanks you for your time.

Best regards,

Brian DeCoudres
General Manager
DuPage Flight Center

https://flightbridge.com/go/DuPage
ATTENTION : National Fire Protection Association
NFPA 407 Technical Committee

My Name is Robert Logan and I represent the Janesville Jet Center, the only FBO located at the Southern Wisconsin Regional Airport (KJVL) in Janesville Wisconsin. As the Fixed Based Operation for the Regional Airport of Southern Wisconsin we serve both the Commercial and General Aviation industries for Southern Wisconsin. We are a small FBO with Revenue of $1,000,000 to $1,500,000 per year and we operate two tank farms and Three Fuel Trucks. We strongly support the TIA 1539 to the proposed NFPA 407 regulations covering fueling operations.

The regulation as written would require our business to retrofit our loading facilities and fueling vehicles at a cost of $30,000 to $50,000 which would cause an extreme hardship for our business. This hardship would be in addition to the 20% reduction in revenue that we have already incurred due to the current economic effects of the current crisis.

Please note that our facilities comply with all previous regulations for overflow protection and note that over the last five years that we have invested over $200,000 in upgrades and investments to our fuel farms to comply with other Federal Regulations governing fuel storage and fueling operations.

Please accept this email as a formal declaration of our support for the Language Changes requested by TIA 1539 to the proposed NFPA 407-2017 and eliminate the requirements for existing facilities.

Should you have any questions about this communication or need to contact me please reply to this email address of contact our offices at:

Janesville Jet Center
4606 S. Atlantis Drive
Janesville, WI 53546

General Manager: Bonnie Cooksey
Business Consultant: Robert Logan
I concur with the language change to read: New loading systems shall comply with 5.1.12.1 through 5.1.12.3.

That gives the Fueling Agents and companies a chance to come into compliance.

Arnold Payne
ARFF Fire Chief-STX
Virgin Islands Port Authority
Foran, Rosanne

From: John Thurston
Sent: Wednesday, November 4, 2020 9:40 AM
To: Shared TIAs
Cc: John Thurston
Subject: NFPA 407 TIA 1539
Attachments: Proposed_TIA_1539_NFPA_407.pdf

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CAUTION: Always use caution when opening attachments. Make sure you know the sender and are you expecting one.

NFPA,

I am writing in support of the recent NATA TIA 1539 addressing the NFPA 407 requirement to install a “Scully Like” fuel loading shutdown system on each tank farm loading bay and vehicle.

WFS is a major supplier of aviation fuels to over 450 Branded and unbranded network of Fixed Based Operators in the USA and Canada.

We support removing the retro-activity requirement to install this equipment in existing tank farms and vehicles due to the extreme financial hardship imposed on FOBs at this time and the time needed to actually comply and what is expected to be difficult financial years going forward.

By requiring this equipment in new tank farms and vehicles only, it can be more easily installed and absorbed in the overall cost of the new equipment.

Your favorable review and support of the TIA is requested.

Regards,

John C Thurston
Director, Quality Assurance and Technical Authority
Global Physical Operations (Aviation)

"One Team, One Mission"

World Fuel Services Corp.
9800 N.W. 41st Street, Suite 400
Miami, FL 33178
Good Morning,

My name is Joe Rossetti, I am the General Manager of Resort Aviation Jet Center, a fixed base operator located in Coeur d’Alene Idaho. We are a small scale FBO in a very seasonal resort town, we pump just about 500k of Jet A per year and 30k of 100LL using our four in ground fuel tanks and 3 fuel trucks. We have looked at the potential change to NFPA 407 specifically in regards to the retrofit for the automatic “scully type” shutdown systems. Our fuel provider has ball parked about $9000 per fuel tank and $3000 per fuel truck to retrofit. This would be almost $45,000 to retrofit our existing system that has not failed us yet. All of our trucks are outfitted with the standard overfill protection and those protection systems are checked every day per our QC standards and daily checks. We can understand wanting to move forward with this as the industry standard as it will protect future systems, however asking us to retrofit our in place systems would require a massive investment in both time and money that would be detrimental to our bottom line. With the seasonality of our business our revenue slows to a crawl from October to April, we fully support TIA 1539 and ask that you hear our voice and hope that it passes so that ourselves and other FBO’s would not have to feel the burden of this change.

Please contact me if you have any questions.

Thank you

Joe Rossetti

General Manager

Resort Aviation Jet Center
Coeur d’Alene Airport
11101 Airport Rd, Hayden ID 83835

www.resortaviationjet.com
Good morning,

I manage a General Aviation Airport in Statesboro, Georgia. We have a fuel farm with both Jet A and AvGas. We also have a refueler for each.

I am in support of TIA 1539.

Making a regulation requiring that we retrofit our equipment would be difficult with our already tight budget. In order to install the new equipment, we would have to look at possibly cutting back on services and potentially employees. I do not think that the benefits would outweigh the cost.

Our equipment already has overfill protection installed. Additionally, we ensure that we have a person onsite while filling the tanks or the trucks.

Again, I am in support of TIA 1539.

Thank you,
Kathy Boykin
Airport Manager
Statesboro-Bulloch County Airport
601 Airport Blvd.
Statesboro, GA 30461
Good Morning,

My name is Darcy Belcher. I am the Customer Service Supervisor at Resort Aviation Jet Center in Coeur d’Alene, Idaho. We are a small FBO located in a seasonal resort town. All our current fuel farms and mobile refueler trucks are in working order and see no reason why we would have to update to the “scully system”. If we put the system in it would be roughly $45,000 for us to do this. That is not reasonable. Our only peak time of business is May thru October. Having to upgrade to the system would take time and money. I can see this system being forthcoming in future new fuel farms and refueler trucks, but not at our location. I fully support TIA 1539 and hope that my voice is heard for my location as well as other FBO’s that would potentially have to put in the system.

Thank you for your time and if you have any questions please don’t hesitate to contact me.

Darcy Belcher

Customer Service Supervisor

Resort Aviation Jet Center- KCOE
11101 N. Airport Rd. Hayden Lake, ID 83835

www.resortaviationjet.com
Dear NFPA 407 Technical Committee Members,

I am writing to express our firm support for passage of TIA 1539 submitted by the National Air Transportation Association (NATA) on behalf of FBO operators like us.

Hill Aircraft is a small, family run fixed based operator located in Atlanta, GA. Since 1955, we have served the general aviation community, government agencies, military, and corporate flight departments operating out of Fulton County Executive Airport (FTY). Over the last 65 years our business has grown to be one of the leading independent operators in our area with a commitment to incorporating industry best practices and a priority for safety within our operations.

While we recognize the intent of NFPA 407 adopting section 5.1.12.4 to equip refuelers and fuel farms with new technology sensor systems that would assist in prevention of fuel spills, we are concerned over the consequences of how this section was written. Specifically, the requirement that this would apply to existing fuel systems retroactively creates a significant cost burden on our business, as well as hundreds of others throughout the country. This comes especially at a time where operators have been significantly impacted by COVID-19. Moreover, we believe that the retroactive requirement on this new scully-type shutdown system imposes an unnecessary cost burden and overreach in that our current fuel trucks already have existing systems designed to prevent such occurrences from happening. The overfill pre-check systems that our trucks have in place now more than sufficiently satisfy and mitigate this risk.

We support your efforts to apply this technology on new fuel trucks and fuel farms that are put into service, but respectfully request the technical committee’s approval of TIA 1539 to remove the retroactive nature of the mandate for the reasons included herein. I appreciate the consideration of this email in support for NATA’s efforts and believe them to be in the genuine best interest of everyone involved. Please contact me should you have any questions or to discuss this matter further.

Respectfully,

Andrew Ash
General Manager

3948 Aviation Circle, Fulton County Airport - Brown Field (KFTY), Atlanta, GA 30336
Aircraft Sales | Aircraft Management | Charter | FBO Services | Maintenance | Parts Support
Good Evening,

My name is Ben Gibson, I work for Resort Aviation Jet Center based of out KCOE in Coeur d’Alene Idaho. I am the line supervisor for this small scale FBO that operates on a very seasonal schedule. We will typically pump roughly around 500K of jet A and around 30K of 100LL each year. We do this via our three fuel trucks and our 4 in ground fuel tanks. I have been reviewing the potential changes to NFPA 407 in regards to the shutdown systems that we would have to replace to be in accordance with this change. Unfortunately it would cost us around $45,000 when it is all said and done to retrofit our entire system that has not had a failure. We pride ourselves on our high QC standards and we are checking these systems every day. Our trucks are fitted with the standard overfill protection and I understand the industry wanting to move forward and setting a new safety standard. If this is changed we will have to put forth a massive investment into our systems and can harm our bottom line due to our FBO operating very seasonally. The company and I are in support of ITA 1539 and hope our voices will be heard. We want to see this pass so not just us but other FBO’s are not affected by the burden of this change.

Please let me know if there is anything else I can do to help.

Regards,

Ben Gibson
Line Supervisor
Resort Aviation Jet Center-KCOE
11101 N Airport Rd, Hayden Lake ID

[Website Link]
To Whom it May Concern,

With respect to the above and its possible integration to NFPA 407 Standards, Shoreline Aviation would like to comment as follows:

Shoreline Aviation is a general aviation service company based at the Marshfield Airport in Marshfield, MA. The implementation of TIA 1539 by the National Fire Protection Association would provide relief to Shoreline Aviation, Inc. and other small aviation businesses that are coping with downturns associated with the Covid19 pandemic.

Shoreline Aviation currently has one Jet A loading rack supporting one (1) 12,000 gallon AST and one Avgas loading rack supporting one (1) 6,000 gallon AST. Although our above ground fuel farm is only about eleven months old and is equipped with the Scully System, our 3,000 gallon Jet and 1,000 gallon Avgas trucks, both of which are older, are not equipped with an automatic shut-off system.

The fuel farm is inspected each year and signed off by the respective Fire Departments as complying with the NFPA-407. Our line service staff is trained to conduct daily and monthly specific inspections to the strictest of industry standards. Furthermore, we have an annual fuel farm inspection and training with our supplier, strengthening our commitment to fuel and equipment quality control and safety.

We would fully support removing the retroactive nature of the current language in the NFPA and applying the revised standards to new fuel farm and fuel truck installations only. Implementing expensive new regulations at a time when businesses are coping with the challenges of a pandemic would have a very negative impact.

Respectfully,

Jason S. Tibbetts
Operations Team
To Whom It May Concern,

Please let this email serve as the El Reno Regional Airport’s official comment on the upcoming proposed regulation amendments. As a general aviation facility, fuel sales are extremely vital to the success and future of the airport. As an airport that has just started, for the first time in the history of the airport, full service Jet A, it is difficult to get the word out about our new and improved facility. Putting more regulations on our already over regulated fuel system makes it more difficult for us to make enough money to justify our expansion efforts. With everything being so new as it is our overhead costs are very high.

It is our ask that we only require new fuel systems to adhere to these new regulations. We spent $1.3 million on our fuel system and it hasn’t even been operational but for nine months. Additional expenses would be hard press with the low clientele we currently have.

Respectfully,

Adam Fox | Airport Manager | El Reno Regional Airport
6600 S Mustang Field Road, El Reno, OK 73036
From: Andy Munro  
Sent: Friday, November 6, 2020 12:53 PM  
To: Shared TIAs  
Subject: Support of Proposed TIA 1539  

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I support proposed TIA 1539

Thanks,

Brad

Brad Zeman
Hello,

We heard about the imposed fuel bills for the auto-shut off - we've had so many hardships this year and implementing this would cause us tremendous hardship. Please stop this!

Freddie Ephraim
Baltimore Heliport
Dear Sir,

I support proposed TIA 1539. I respectfully ask that you pass this amendment to protect airports and FBO’s from this unnecessary cost of doing business.

Thanks

Robert E. Barker
President AirStar Charter
Airport Manager of Swainsboro/Emanuel County GA Airport
To whom it may concern:

As the Operations Manager for the past 15 years here at Bellingham Aviation Services, I can plainly state that current high level devices are more than adequate in preventing fuel spills at our airport from filling errors. Adding scully type requirements would be an unnecessary financial burden on our small operation with no improvement in safety.

We therefore support the passage of TIA 1539. Thank you for your time and attention to this matter.

Jason Hart
Operations Manager
Bellingham Aviation Services, LLC.
Bellingham International Airport
4201 Mitchell Way
Bellingham, WA 98226
I fully Support TIA 1539

Geoff Heck
Senior VP Operations - East
Don Davis Aviation, Inc supports the proposed TIA 1539.

Nancy D. Blaisdell
President
Don Davis Aviation, Inc

Nancy Blaisdell
Don Davis Aviation, Inc
2154 Hwy 136 West
Henderson, Ky 42420
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Sent from my iPhone
I fully support proposed TIA 1539.

Robert West | General Manager
Signature Flight Support | KBTR

www.signatureflight.com/locations/btr

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I fully support proposed TIA 1539.

Tosha Szabo | General Manager
Signature Flight Support – RDU
Signature Aviation

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I fully support proposed TIA 1539.

Daniel Lyon | General Manager
North Palm Beach and Pahokee

11600 Aviation Blvd | West Palm Beach FL 33412

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I fully support proposed TIA 1539

Ben Wells | General Manager
Signature Aviation

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Please consider the environment before printing this email.
Good day,

I fully support proposed TIA 1539,

Thanks

Mike Mancuso Jr | General Manager- CHO & ROA
Charlottesville–Albemarle Airport
100 Aviation Dr. Suite 100
Charlottesville, VA 22911

Roanoke-Blacksburg Regional/Woodrum Field
22 Waypoint Drive
Roanoke, VA 24012

www.signatureflight.com

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I fully support proposed TIA 1539.

Sanchia Rivera-Beckno | General Manager IAD
23950 Windsock Drive Suite 2000
Dulles, Virginia 20166

www.signatureflight.com
I fully support proposed TIA 1539.

Tammy Hill
Station Manager – BFM
Signature Aviation
I fully support proposed TIA 1539.

Regards,

Jerome M. Fernandez | General Manager BWI
2 Aaronson Drive, Glen Burnie
Baltimore, MD 21061

www.signatureflight.com

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I fully support proposed TIA 1539.

Regards-

Thomas Knollenberg | General Manager – BNA
767 Hangar Lane
Nashville, TN 37217

www.signatureflight.com

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To Whom It May Concern:

I wish to show my support for TIA 1439, which is imperative to continue to support the general aviation airports and FBOs when the economy is depressed and increased costs are burdensome to the industry.

Thank you.

Kerry Himler
Aviation Support Manager
Hampton Airways, Inc.
7007 Airport Drive
Sellersburg, Indiana 47172
I would like you to please pass TIA 1539. We currently have 3 fuel farms with 5 separate fueling systems and having to install a scully system would be a burden to us and our operators which use our fuel farms. The 4 FBOS have a combined total of over 15 trucks.

Greg A Robertson  
Spirit of St. Louis Airport  
Chief Mechanic
Our two FBO’s would be seriously burdened by the retroactive nature of this language. We Support TIA 1539!

Rick Shepard
Vice President of Operations I Aircraft Sales Representative
Skytech, Inc.

www.skytechinc.com

Save a tree...don't print this unless absolutely necessary!

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Foran, Rosanne

From: Carlos E. Reyes
Sent: Friday, November 6, 2020 1:14 PM
To: Shared TIAs
Subject: Support for TIA 1539

Importance: High

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Greetings,
Please take note that our FBO fully supports TIA 1539, because it will:

Provide relief to hundreds of general aviation airports and FBOs from the requirement that they retrofit their fuel farms and mobile refuelers with automatic shutdown systems (aka: “scully type” system

Remove the retroactive nature of the current language in the NFPA 407, applying it to only new fuel farm/fuel truck installations.

Allow airports and FBOs to continue safe operations using the high-level control devices already installed and required on all mobile refuelers, which when operated properly have a demonstrated history of reliability.

Best Regards,

Carlos E. Reyes
President / Chief Pilot
Isla Grande Flying School
I fully support proposed TIA 1539.

James C. Edwards | General Manager BDL, SWF
100 Signature Way
East Granby, CT 06026

www.signatureflight.com
I support proposed TIA 1539.

Cesar Rizik
General Manager
Signature Aviation – MMU
1 Airport Road, Morristown New Jersey, 07960
I fully support proposed TIA 1539

Blaise Sharkey
General Manager - MQS
Signature
Aviation

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Foran, Rosanne

From: Robert Palmer
Sent: Friday, November 6, 2020 1:20 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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Bob Palmer
Hangar Manager
M Automotive Group llc

Sent from my Verizon, Samsung Galaxy smartphone
Get Outlook for Android
Foran, Rosanne

From: Michael Lawrence
Sent: Friday, November 6, 2020 1:23 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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Our company supports the proposed TIA 1539.

We operate at the highest level of safety, with a trained professional on site using deadman switches for all fuel transfers. A requirement to retrofit with automatic shutdown systems would be unnecessarily burdensome and would not increase the safety of our procedures currently in place. We have never had a failure of our high-level control devices already installed and required.

Thank you,

- Michael

Michael Lawrence
Operations Manager | Premier Jet Center

flypremierjet.com
14801 Pioneer Trail, Eden Prairie, MN 55347
I fully support proposed TIA 1539.

---!---
\——O("""")O——/
00 00 00

Renee Binkley | Customer Service Representative - MQS
1 Earhart Drive, Suite 1
Coatesville, PA 19320

www.signatureflight.com

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I support TIA 1539. I also encourage the technical committee to approve the TIA. I own Valley Airways Inc. An Aviation BFO that has been in Business for 45 Years under the same owners. The FBO business is a very labor intensive business. To increase my overhead, would make it harder to maintain the bottom line. I appreciate your time.

Sincerely
Richard Bosn
President
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Please note that the West Houston Airport is in favor of TIA 1539. This is important as the business has been impacted seriously by the Covid-19 and that it needs all the relief it can get to sustain operations.

Thank you,
Woody Lesikar
Airport Manager
West Houston Airport

P. O. Box 941789
Houston, Texas 77094
Good Afternoon,

I fully support proposed TIA 1539

Benjamin Klimko | General Manager HXD
Signature Aviation HXD | 52 Gateway Circle
Hilton Head Island, SC 29962

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.
Southwest Aviation is a small, family owned, FBO at the Las Cruces International airport for over 50 years. Failure to pass TIA 1539 will cost us from $13,500 to $20,500, not counting taxes and downtime. We see nothing to be gained by requiring the changes to our equipment this amendment will eliminate.

Harold Kading  
President  
Southwest Aviation Inc  
Las Cruces International Airport
I fully support proposed TIA 1539

Chuck Buckland - General Manager
Signature Flight Support - AVL
40 Lindbergh Ln
Fletcher, NC 28732
Foran, Rosanne

From: Clay Owens
Sent: Friday, November 6, 2020 1:33 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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I support TIA 1539 -

Sent from my iPhone
To Whom it may concern,

My name is Ethan R. Crane, I am the General Manager, Vice President and a share holder at Gillespie Air Services, Inc. dba Fredericksburg FBO. Our FBO is located at T82 airport (Gillespie County Airport) in Fredericksburg, Tx. I support TIA 1539 and I encourage the Technical Committee to approve the Tentative Interim Amendment proposing the change to NFPA 407- Standard for Aircraft Fueling. Retrofitting our existing fuel shutoff systems to skully type shutoffs would be burdensome and add expense to our business. The current high level shutoff systems are simple and work reliably.

Sincerely,

Ethan R. Crane
General Manager and Vice President
Gillespie Air Services, Inc.
217 Airport Rd.
Fredericksburg, TX 78624
I am writing in support of proposed TIA 1539 to provide relief to operators such as myself. As a full service FBO, we have been struggling to maintain the level of fuel sales that we have done in the past. Our margins have been kept low in order to be competitive and costs have gone way up for insurance, utilities and labor. It is definitely not a great time to be adding a huge mandatory cost to us at this time.

Our high level control devices are installed and are working fine.

Please have some compassion in these challenging and scary times and let’s pass some relief.

Thank you very much

Regards,
Ken Smith
General Manager
Three Wing Aviation Group, LLC
Sikorsky Memorial Airport
I fully support proposed TIA 1539.

Tatiana Cruse  
Assistant General Mgr - KMIA  
Signature Aviation
I fully support proposed TIA 1539.

Matumi R Shigemoto | General Manager  
Arrindell Aviation by Signature Flight Support  
Princess Juliana Int’l Airport  
St. Maarten, Dutch Caribbean

www.signatureflight.com
I fully support proposed TIA 1539.

Alfredo Lopez | General Manager
Huntsville International Airport
2000 Houston Goodson Way
Huntsville, AL 35824

www.signatureflight.com
I fully support proposed TIA 1539.

Eddie Cabrera | Area General Manager MCO/ISM/EYW
Orlando International Airport
4215 Lindy Cir.
Orlando, FL 32827

www.signatureflight.com
I fully support proposed TIA 1539

Together, we will get through this!

Chip French | Duty Manager
Signature Flight Support - HXD
52 Gateway Circle
Hilton Head Island, SC 29926
ARINC: 128.875

www.signatureflight.com

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I fully support proposed TIA 1539.

Jeff Gillquist | General Manager | PIE
Signature Aviation
14525 Airport Parkway
Clearwater, FL 33762

www.signatureflight.com

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Foran, Rosanne

From: Adkins, Rachel (SFS-HXD)
Sent: Friday, November 6, 2020 1:42 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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……..I fully support proposed TIA 1539.

Rachel L Adkins | Lead CSR
52 Gateway Circle
Hilton Head Island, SC 29926

www.signatureflight.com

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I support proposed TIA 1539.

Stacy Suazo | General Manager - ACY
Atlantic City International Airport, Suite 112
Egg Harbor Township, NJ 08234

www.signatureflight.com
Dear Committee,

As the General Manager for Sheltair Daytona, I’m writing to you to show support for TIA 1539. Like so many FBO’s and aviation businesses around the country, we are still feeling the financial impacts from COVID-19. Our Daytona location has 8 fuel trucks and a large fuel farm facility. To retrofit our farm facility and fuel trucks with a scully system would be a substantial hit to our bottom line, in a time when we are working so hard to try and continue providing service to the Daytona Beach airport and community. Our Sheltair location here in Daytona was one of the first of two FBO’s formed by our owner, Mr. Jerry Holland, back in 1988; we have continually served the aviation community here since that time, and look forward to many years of the same.

Thank you for your careful consideration and time. I look forward to hearing the outcome.

Best regards,

Arvin Weese
General Manager Daytona
www.sheltairaviation.com

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Sirs:

I am the General Manager of Base Operations at Page Field, an FBO located in Fort Myers, Florida. KFMY is our airport identifier. We are also the Lee County Port Authority and own and operate KFMY and KRSW. At KFMY I am responsible for overseeing an airport operation encompassing all airfield fueling and hangar operations.

I am writing to you today to voice my support for TIA 1539. Without the change indicated in TIA 1539, we would be forced to make substantial expenditures and work within a time frame that is logistically impossible. I urge you to approve Tentative Interim Amendment 1539 so we may realistically work toward the goal of creating a safer environment for our industry.

Thank you for your attention to this matter.

Best regards,
Jonathan Buff

Jonathan Buff
General Manager
Base Operations at Page Field
www.baseoperationsfmy.com

Please note: Florida has a very broad public records law. Most written communications to or from Port Authority employees and officials regarding Port Authority business are public records available to the public and media upon request. Your email communication may be subject to public disclosure.
NFPA/407 Technical Committee,

I fully support proposed TIA 1539.
Dear Sirs,

I fully support proposed TIA 1539.

Regards,

Raquel Chandleur | General Manager

Signature Trinidad Limited | Executive Jet Centre, South Terminal
Piarco International Airport, Golden Grove Road, Piarco, Trinidad & Tobago

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From: Wetherill, James (SFS-MCO)
Sent: Friday, November 6, 2020 1:48 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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To whom it may concern,

I fully support proposed TIA 1539.

Respectfully,

Matthew Gibbon | Duty Manager
2000 Houston Goodson Way
Huntsville, AL 35824

www.signatureflight.com

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I support.
To whom it may concern,

Please know that our companies cumulative 80 years of training in the General Aviation fueling operations, over-fill accidents are negligible.

The cost burdening on the existing fueling systems and equipment with NFPA 2017 5.1.12.4 at this time in light of all considerations should be eliminated.

We enthusiastically support TIA 1539.

Walter P. Chartrand
Aviation Training Academy
**The NEW Standard in Flightline Training**

[aviationta.aero](http://aviationta.aero)
[Find ATA on LinkedIn](http://Find ATA on LinkedIn)
I fully support proposed TIA 1539.

Ben Sanzone | General Manager
East – 2 Hangar Rd. West – 85 Tower Rd.
White Plains NY 10604

www.signatureflight.com
This is a small County-owned general aviation airport in the central New York State. The COVID-19 pandemic has had an adverse effect on our traffic and fuel sales this year. We don't have the funds to meet the proposed rule to upgrade our fuel farm. We support TIA 1539 and encourage the technical committee to approve the TIA.

Thank you.

David Haimes
Airport Manager
Finger Lakes Regional Airport
Seneca Falls, New York 13148
I fully support proposed TIA 1539.

Lance Davidson
Duty Manager
Signature Flight Support KCHO

Get [Outlook for iOS](https://www.microsoft.com/store/p/outlook-for-ios/)
Dear Sirs,

As an Aviation Fuel professional who has worked in this industry for over 32 years I would like to provide my letter of support for the proposed TIA from NATA regarding the requirement to install “Scully” type systems at FBOs across this country.

I do NOT favor the requirements of the proposed retrofit of all fuel storage facilities to have rack mounted high level shutoff systems for the following reasons:

1. The onerous cost to install such systems at storage facilities which are of limited size and throughput.
2. The onerous cost to install truck mounted system hardware on all refuelers.
3. The existing fleet of Aviation Refuelers have at least one primary and sometimes two redundant systems of high level shutoff which are testable prior to truck tank loading. The primary Jet Level Sensor is a time-tested and trusted method of fuel shutoff during loading. Secondary forms such as Gem Switches or Tank Volume systems which close an independent valve providing a completely independent form of shutoff. These systems are very reliable and already in place on the vast majority of Aviation Refuelers.
4. In my opinion this system should be scalable for the complexity of the operation. Large, high volume loading systems should be addressed first and the smaller, lower volume locations should be allowed to continue to use the existing, time-tested systems.

Please consider the TIA as proposed and not impose an unnecessary hardship on already struggling Aviation Companies who are already experiencing significant challenges this year from the negative impacts of Covid-19. This is a considerable cost to many of our customers and would negatively impact their ability to be profitable.

Regards,

Derek Burge
Aviation Technical & Sales Manager | CityServiceValcon, LLC

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Good afternoon,

I am writing you to express my support of the Tentative Interim Amendment (TIA) 1539 to the above code. Adoption of NFPA 407 will present an onerous burden to an already safe system currently being used by General Aviation airports around the country.

Thank you for your time.

Respectfully,

Ike Kelly,
Airport Manager
I fully support proposed TIA 1539

Bane Shepherd | Duty Manager
14525 Airport Parkway
Clearwater, FL 33762

www.signatureflight.com
Foran, Rosanne

From: Madgett, Devin (SFS-FTY)
Sent: Friday, November 6, 2020 2:20 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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I fully support proposed TIA 1539.

Thanks,

Devin Madgett | General Manager-FTY
Signature Aviation
3956 Aviation Circle
Atlanta, GA  30336

www.signatureflight.com

Signature
AVIATION

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Good Afternoon,

My name is Lynn Beard. I am the General Manager of Abilene Aero, the Fixed Based Operator (FBO) at Abilene Regional Airport (KABI). I am also the safety manager for Lubbock Aero at Lubbock Preston Smith International Airport (KLBB) in Lubbock, Texas.

I am writing to express my strong support for NATA’s Tentative Interim Amendment (TIA) 1539, proposing an important change to NFPA 407.

Our FBOs would shoulder an unreasonable burden if the retroactive requirement for retrofitting our fuel farms and mobile refuelers with automatic shutdown systems is not adjusted. Each of those systems already have emergency shutdown systems.

At a time when our business has seen month to month declination in fuel sales between 20% and 80%, this is an ill-timed and ill-advised proposal.

Many in our industry relied upon the Payroll Protection Program and the Payroll Support Program to meet the needs of our employees and avoid layoffs.

Should the proposed rule pass without TIA 1539 modifications, our company will face estimated costs near $75,000 to comply. Furthermore, those expenditures would be required within six months, during a time when exhaustion of PPP and PSP dollars will have taken place.

If the rule passes, vendors who can complete the modifications in such a short time will become overwhelmed, creating a back log similar to the ADS-B Requirements, which still continues today.

Additionally, I have seen no data which supports the need for automatic shutdown systems. Fuel farm and refueler fires are extremely rare. In fact, in 52 years of operation at Abilene Aero, we have never had a fuel truck/fuel farm fire or significant fuel spill that exceeded the design of a manual shutdown system.

Respectfully,

Lynn Beard
General Manager & Aircraft Sales 32

ABILENE AERO

Providing Excellence in Aviation
Since 1968
As the Manager of a small rural airport, I totally support the adoption of TIA 1539. Small rural airports do not have the cash flow to fund such costly modifications without enough prior notice to accrue the necessary revenue. At this airport we are currently experiencing difficulty funding the normal airport maintenance and development requirements for FY 2021. A temporary hold would be immensely helpful.

Ted Swendra
Airport Manager
Avi Suquilla Airport / CRIT Air
28940 Airport Road
Parker, Arizona 85344
I fully support proposed TIA 1539

Adam Marymee | General Manager
1001 Davidson Drive, Suite 150
Savannah, GA 31408

www.signatureflight.com
From: Toby Tobin  
Sent: Friday, November 6, 2020 2:33 PM  
To: Shared TIAs  
Subject: Support of Proposed TIA 1539  

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As a family owned FBO, we are strongly in support of TIA 1539. Especially, in the current aviation market the cost to modify our fuel storage and every fuel truck is a major concern. We accept the need for any new equipment to meet the latest standards, but to update and modify our existing fleet of vehicles and loading racks would be a great burden.

--
Sincerely,

Toby Tobin  
Aero Industries, Inc.  
Richmond International Airport
Foran, Rosanne

From: Scott Fank
Sent: Friday, November 6, 2020 2:40 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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To whom it may concern,

I support the proposed TIA 1539

Scott Fank
Vice President, Sales
JA Air Center
Good afternoon,

I fully support proposed TIA 1539.

Thank You,

Wesley S. Lowery | Duty Manager
23950 Wind Sock Dr, Ste. 2000
Dulles, VA 20166

www.signatureflight.com

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Please consider the environment before printing this email.
I fully support proposed TIA 1539.

Addie Fanguy | GM
5801 Walter Beech Street New Orleans, LA 70126
www.signatureflight.com

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God afternoon, I’m sure I am not the first to question the proposed amendment. With all that is going on in this crazy world additional money that would be added to the initial cost of operating a FBO, this is not the time. If anything, a grandfather clause for any equipment made or delivered prior to, for sake of argument, on or before, lets say June 2021 already equipped with full level auto shut-off and tested periodically will be sufficient. This equipment has been working fine. MY 2 cents. Thank you

Robert (Bob) Byrd
Director of Operations @
Nashua Jet Aviation, LLC.
83 Perimeter Rd.
Nashua, NH 03063
Good afternoon,

Thank you for your time, I know it is very valuable. I am writing to place my company's support behind the TIA 1539 proposal. Retrofitting our very old fuel farm and very old trucks would be a major burden on our operation. The age of both the fuel farm and the trucks make the retrofit on equipment, with very little shelf life, prohibitive. During these trying times, we are working each day just to stay in business. We would be very willing to apply the proposed requirements when we build our next fuel farm, likely in 3-5 years. Due to the Airport's masterplan, our fuel farm will most likely be torn down in 5 years.

Please let me know if I can answer any further questions. Have a great weekend.

Michael Clarke
President
Richmond Jet Center Inc.
I fully support proposed TIA 1539.

Include your "signature" like mine below

Dieter Stucke | GSE
Signature Flight Support
1 Earhart Drive, Suite 1
Coatesville, PA 19320
Support!

Sent from my iPhone
I fully support TIA 1539
Western Jet Aviation is in support of proposed TIA 1539

Jim Hansen
CEO/Founder
Western Jet Aviation
Van Nuys Airport
I am an private FBO and terminal owner and operator and I fully support adopting the TIA 1539 change to avoid additional and unnecessary expense in operating a fuel farm.

Pls consider my request to vote yes.

Regards

Tim

Tim Peace
Chief Operating Officer
Crew Aviation LLC
KSDF
Louisville KY 40213

--
Timothy L. Peace, MBA, CAM
Chief Operating Officer / Director of Operations
Crew Aviation, LLC
1176 Standiford Ave
Louisville, KY 40213

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Foran, Rosanne

From: Orefice, James (SFS-SYR)
Sent: Friday, November 6, 2020 3:23 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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I fully support TIA 1539.

James Orefice|General Manager-SYR
248 Tuskegee Road
Syracuse, NY 13211
+ www.signatureflight.com

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I support proposed TIA 1539

Scott C. England

J.A. Air Center - Celebrating 54 Years in General Aviation!

Visit our FBO Rated #1 by AIN!

Aurora Municipal Airport
43W730 US Rt. 30
Sugar Grove, IL 60554

www.jaair.com
I support proposed TIA 1539

During this trying time with the Covid-19 Pandemic, J.A. Air Center is open and supporting our customers. We are practicing safe protocols, keeping customers out of our work areas and at safe distances with masks required in the public areas. We have kept the virus at bay and hope we can continue to do so with your cooperation.

Thank you and have a wonderful day!

Frankie Ferestad
Administrative Assistant

J.A. Air Center
RATED #1 FBO in NORTH AMERICA
Aurora Municipal Airport
43W730 US Route 30
Sugar Grove, IL 60554

www.jaair.com
Foran, Rosanne

From: Mike Imgrund  
Sent: Friday, November 6, 2020 3:42 PM  
To: Shared TIAs  
Subject: Support of Proposed TIA 1539

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To Whom It May Concern.

I support proposed TIA 1539.

Thank you,

Mike Imgrund  
Interior Dept.  
Manager J.A. Air Center
I fully support proposed TIA 1539

Thank you,

Pablo M. Espitia | General Manager
Ronald Reagan-Washington National Airport General Aviation Terminal, Hangar 7 Washington, DC 20001

www.signatureflight.com
I support proposed TIA 1539

Mark Herrmann
Avionics Service Manager

Aurora Municipal Airport
43W730 US Rt. 30
Sugar Grove, IL 60554
http://www.jaair.com
Foran, Rosanne

From: Mike Bargman  
Sent: Friday, November 6, 2020 3:44 PM  
To: Shared TIAs  
Subject: NFPA 407

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I support proposed TIA 1539

Mike Bargman  
Manager, Information Technology  
J.A. Air Center
For the change to NFPA 407, I positively support the proposed TIA 1539.

Stefan Goeller
Lineman - MQS
Signature Aviation

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Foran, Rosanne

From: Greg Bernickus
Sent: Friday, November 6, 2020 3:54 PM
To: Shared TIAs
Subject: NFPA 407

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I support proposed TIA 1539

Greg Bernickus
J.A. Air Center - Celebrating 54 Years in General Aviation!

Visit our FBO Rated #1 by AIN!

Aurora Municipal Airport
43W730 US Rt. 30
Sugar Grove, IL 60554

http://www.jaair.com
Foran, Rosanne

From: Bernie Klotz
Sent: Friday, November 6, 2020 3:54 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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I support TIA 1539.

Sent from my iPad
Bernie Klotz
I support proposed TIA 1539

Greg Boatner

J.A. Air Center
Aurora Airport
43W772 U.S. Rt.30
Sugar Grove Il. 60554

http://www.jaair.com
Foran, Rosanne

From: Zachary Burch
Sent: Friday, November 6, 2020 3:56 PM
To: Shared TIAs
Cc: Chris Rozansky
Subject: Letter of Support for TIA 1539 to NFPA 407

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CAUTION: Always use caution when opening attachments. Make sure you know the sender and are you expecting one.

Please see the attached letter of support for TIA 1539 to NFPA from Christopher Rozansky, Executive Director of the Naples Airport Authority.

Please let me know if you have any additional questions.

Respectfully,

Zac Burch

Zachary Burch | Community Engagement/Communications Manager

160 Aviation Drive North
Naples, FL 34104
flynaples.com
November 6, 2020

Mr. Cary Skinner, Chair  
National Fire Protection Association 407 Technical Committee  
5939 North West Circle Avenue  
Chicago, IL 60631

Dear Mr. Skinner:

Please consider this request on behalf of the City of Naples Airport Authority regarding approval of Tentative Interim Amendment (TIA) 1539 to NFPA 407-Standard for Aircraft Fuel Servicing. Approval of this TIA is critical, particularly to smaller General Aviation airports like the Naples Airport.

Current fueling systems at the Naples Airport already utilize a double-redundant system to prevent spills and accidents from occurring, meaning that the existing regulations would simply add another level of redundancy to an already safe system, with a proven safety track record. We are currently unaware of any incidents that have occurred with a double-redundant system like ours and would request that the committee share any information about any such incidents to better understand the risk.

The current unamended standard would have profound effects on airports large and small, including the Naples Airport. The loss of access to this critical fueling equipment while it is being retrofitted for a third redundant system would pose a serious operational issue for the airport, as we are the sole provider of fuel on the airport premises.

Additionally, based on the current number of fuel trucks and fuel farm loading racks at our facility, we estimate the financial impact of retrofitting our existing equipment to be at least $100,000.

While the Naples Airport Authority remains committed to purchasing new equipment that meets or exceeds the latest safety standards, retrofitting our existing equipment would have serious operational and financial implications for our facility.
In the future, issues like this could likely be resolved by first consulting with and obtaining feedback from stakeholders within the aviation and airports industry prior to the publication of proposed regulations.

We appreciate your consideration in the matter and urge you to approve TIA 1539 so that the Naples Airport can continue to meet critical safety standards while still providing the same excellent level of service to our customers.

Sincerely,

Christopher A. Rozansky
Executive Director

cc: Stephen Ganoe, Staff Liaison, National Fire Protection Association
    Yiu Lee, Project Administrator, National Fire Protection Association
I fully support proposed TIA 1539.

Nick Sheplock

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I fully support proposed TIA 1539.

Jon Zelie | Airline Services Manager - ORF
6101 Burton Station Rd.
Norfolk, VA 23502

www.signatureflight.com

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I support TIA 2539

Shalene

Sent from my iPhone
I fully support proposed TIA 1539.

Lana Ignacio | General Manager
LG Hanscom Field
180 Hanscom Drive
Bedford, MA 01730

www.signatureflight.com
Most airplanes require manual intervention on when to turn off the fuel. Requiring these changes to existing systems would be a waste of money for our already strapped airports. All GA planes require a person to oversee the filling and automatic shutoff would make them more careless.

Thanks,
Joe Hake
Lawerence County Airport Authority.
New Castle PA 16101
Dear NFPA 407 Technical Committee Members,

Aero Air fully supports the adoption of TIA 1539 and strongly urges the technical committee’s approval.

Since Aero Air’s founding in 1956, we have spent many tens of thousands of dollars in the interest of fueling aircraft in a manner which is both environmentally safe and protected from fire and other hazards. We believe that the current language in NFPA 407 paragraph 5.1.12.4 which retroactively requires all operators to install automatic shutdown systems by June 2, 2021 places an unnecessary burden on existing small FBOs.

Our underground fuel farm is NFPA 407-qualified with a flow rate setting of 200 gpm. Our fuel trucks are all equipped with high level shutoffs and we have pre-check procedures in place as well as a spill containment structure at our loading rack. We have observed similar measures at other small FBOs throughout the country.

While it may make sense to install complex and expensive automatic shutdown systems for high-capacity operations, we feel these systems are overkill for the lower rates at which we pump fuel.

We support the Proposed TIA 1539 to provide relief from the current NFPA 407 para 5.1.12.4 language requiring installation of automatic shutdown systems for “existing” loading systems. Thank you for consideration and please feel free to reach out if you have any additional questions.

Josh Ellington
FBO Manager
Aero Air, LLC
Hillsboro, OR
Foran, Rosanne

From: Pieter Miller
Sent: Friday, November 6, 2020 5:06 PM
To: Shared TIAs
Subject: NFPA 407

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Please pass TIA 1539. Smaller airports with limited revenues will have a hard time coming up with funding streams and/or budget requests to retrofit the applicable equipment.

Regards,
Pieter Miller

Pieter Miller, C.M. | Hutchinson Airport Manager | City of Hutchinson |
I support proposed TIA 1539. This will only hurt already struggling businesses if not passed.

Thank you.

Don Morgan

Donald Morgan  
_Piston aircraft Service Manager_  
_J.A. Air Center_  
_Aurora Airport_  
_43W730 US RT30_  
_Sugar Grove, IL 60554_
To Tias Errato Fis-
- The implementation of the standards being called for with the NFPA 407 Standard for Aircraft Fuel Servicing is excessive.
- Safety standards and safeguards are already in place that prevent inadvertent discharges and this action will not materially increase the level of safety.
- Associated costs will not significantly reduce risk. I strongly endorse and support the NATA TIA 1539.
- I meet with fuel farm managers at the FBO's that I audit in our system and have not been made aware of a single instance where large fuel discharges have occurred using the current standards and safeguards.

Feel free to contact me with questions.
To Whom It May Concern,

I am writing you to support the TIA 1539 proposal. It is my hope that the technical committee has already weighed the impact this will have on countless aviation businesses. I appreciate your consideration in this matter. I am the General Manager of a small family owned FBO in Oxnard California. I know this requirement would create an unnecessary financial burden on our company in these somewhat uncertain times. Please don’t hesitate to reach out if you have any questions. Thank you again. Godspeed~

Regards,

Brian Simmons
General Manager

1601 W 5th St.
Oxnard Ca. 93030
I fully support proposed TIA 1539.

Nicole D. Patrone | General Manager- TTN
Trenton Mercer Airport, 18 W Piper Avenue
Trenton, NJ 08628

www.signatureflight.com
Foran, Rosanne

From: Steve Abbott  
Sent: Friday, November 6, 2020 6:13 PM  
To: Shared TIAs  
Cc: Richard Schermerhorn; D Degraw  
Subject: Support of Proposed TIA 1539  

Importance: High

To NFPA and the 407 Technical Committee Members,

Rich Air, the Fixed Based Operator (FBO), at the Floyd Bennett Memorial Airport, (KGFL), strongly supports TIA 1539.

Rich Air, a small FBO at KGFL, serving the small Southern Adirondacks Region of Upstate NY at KGFL, (A 139 Airport), with highly skilled and NATA Safety 1st 139.321 Trained/Certified Employees, has been providing Professional Refueling, Maintenance and Concierge Services to the local and transient aviation community at KGFL for a little over 10 + years now. And although we do collect hangar rent, provide Part 91 GA Maintenance on-site and collect Misc. Fees, almost 75% of our revenue is dependent on Aviation Fuel Sales.

With the steady decline of 100LL Sales over the past few years already due to various variables, (IE: Aging GA fleet of Piston Aircraft; The push to phase out 100LL in the near future, Rising Aircraft Maintenance costs, Etc.), and now enter the year of Covid-19 in 2020... Aircraft Activity and Fuel Sales have plummeted drastically this year, which have already had a dramatic economic impact at KGFL, and are currently being felt within our company and the customers we serve. (With Aircraft Activity dropping about 65% - 75%, and fuel sales (Both 100LL and Jet A), dropping 40%-50% as compared to this time last year alone).

In conclusion, the originally proposed requirement from NFPA 407 (2017) Paragraph 5.1.12.4 requiring all new and existing loading systems be retrofitted to a Scully System, would cause undoubtably an additional financial hardship and economic impact, for not only Rich Air but also the Aviation Community we serve. For this reason, we kindly ask the retroactive language be removed in NFPA 407 Paragraph 5.1.12.4 and TIA 1539 be approved.

Thank you and best regards!
Steve

Stephen D. Abbott, General Manager

Rich Air  
UNICOM 123.00  
Floyd Bennett Memorial Airport  
443 Queensbury Avenue  
Queensbury, NY 12804  

www.flyrichair.com
I support proposed TIA 1539

Sent from my iPhone
Foran, Rosanne

From: Malin Bergstrom
Sent: Friday, November 6, 2020 7:03 PM
To: Shared TIAs
Cc: Daniel Bergstrom; Jeff Schuetze; Christina Bergstrom
Subject: Comment supporting TIA 1539 - proposed change to NFPA 407

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Please accept this email as my written support of TIA 1539.

My family's company, Bergstrom Aircraft, Inc. has been a full-service FBO at the PSC airport since 1971. My brother Daniel and I are second generation owner/operators. We currently own a fuel farm and several refuelers. We follow NFPA 407 as well as multiple airline requirements, fuel supply agreement and quality control regulations. We maintain our equipment and monitor qc and safety everyday. We use the control devices already installed and required on our refuelers and fuel farm. These systems have proven to be reliable and safe.

Any additional requirements to retrofit our equipment with "scully" systems will have a substantial impact on our operations, at a time when we and many other small businesses are already struggling. Applying the automatic shutdown system requirement to new equipment is reasonable and will allow small businesses to factor this into future business plans.

Please approve TIA 1539. I would be happy to discuss this important issue in more detail if needed.

Blessings and Blue Skies,
Malin Bergstrom
President

www.bergstromaircraft.com
Celebrating 49 years of Excellence in Aviation Services (1971-2020)
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<thead>
<tr>
<th>From:</th>
<th>Janie Oberman</th>
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</thead>
<tbody>
<tr>
<td>Sent:</td>
<td>Friday, November 6, 2020 7:17 PM</td>
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<tr>
<td>To:</td>
<td>Shared TIAs</td>
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<tr>
<td>Subject:</td>
<td>NFPA 407- Standard for Aircraft Fuel Servicing</td>
</tr>
</tbody>
</table>

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**CAUTION:** Always use caution when opening attachments. Make sure you know the sender and are you expecting one.

Please find enclosed letter from Mark Oberman, President of Channel Islands Aviation, Inc. regarding the NFPA 407 – Standard for Aircraft Fuel servicing.

Janie Oberman, Vice President  
Channel Islands Aviation  
www.flycia.com  

305 Durley Avenue  
Camarillo, CA  93010
6 November 2020

National Fire Protection Association and the 407 Technical Committee

To whom it may concern:

My name is Mark Oberman and I am the owner of Channel Islands Aviation, a small family owned and operated FBO at KCMA airport here in Camarillo, CA. We are a full service FBO that offers flight training to prepare young pilots for the world of private and commercial flying, on demand charter, complete maintenance, parts and avionics, and line service supporting our own fleet and incoming aircraft at Camarillo airport since 1976.

I am writing to you in support of the NATAs TIA 1539 for changes to NFPA 407-standard for aircraft fuel servicing. We are a small business and we are feeling the full effect of this pandemic. The added expenses of retrofitting our current trucks and fuel farm with this new equipment would be financially challenging for us in an already difficult situation we face in these unprecedented times.

Currently our trucks and fuel farm are equipped with high-level shutoff mechanisms that, in essence, do the same thing as the new equipment and they have never failed us. I urge you to consider the proposed TIA 1539 that NATA has brought forward to you.

Sincerely,

Mark Oberman
President
As an industry professional with 34-years of service I can confidently share that this regulation is not necessary. Proper training of personnel is a superior protection against potential accidents vs costly retrofitting.

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I fully support proposed TIA 1539.

Thomas Harper
Director - Latin America & Caribbean
IAM Jet Centre by Signature
Foran, Rosanne

From: Noel Fournier
Sent: Friday, November 6, 2020 10:42 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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Noel Fournier
I fully support proposed TIA 1539

H E Prange Jr
LST MQS

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I hereby support the proposed TIA 1539

Markus

Markus Walliser, owner MIAMI CITY FLIGHTS, INC./AIRSWISS/AIRCHARTERMIAMI

MIAMI CITY FLIGHTS, INC
at ATLANTIC AVIATION

Hangar 106

14900 NW 44th Ave, Suite 5

Opa Locka, FL 33054

website: AIRCHARTERMIAMI.COM
I fully support proposed TIA 1539.

v/r,

Michael A. Robinson | Operations Supervisor
Signature Flight Support - HXD
52 Gateway Circle
Hilton Head Island, SC 29926

+ www.signatureflight.com

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I have operated a small fuel farm of just one 10,000 tank for the past 47 years at two different airports and have in that time provided fuel to literally thousands of aircraft without incident. I do not see the need to change current methods of maintaining safe and reliable fuel supplies to the aviation community. There have been so many regulatory changes over my years of operating fuel farms and I feel adding another costly regulation is not necessary.

Dennis Bampton
St Charles Flying Service Inc.
St Charles County Regional Airport KSET
To whom it may concern,

As an FBO owner/operator who is facing a major loss financially due to current events, I pray you do not force additional rules, regulations, and mainly expenses to our operations. Safety is always on the minds of FBO operators and no matter what new expensive safe guards are added and required, man is human and makes mistakes. Sad as that is, nothing man can do or devise can ever remove those events that "happen". Again I pray, do not force additional expenses and practices on FBOs. The result is not a guarantee answer and will just drive prices up to the aviation community.

Jay Patton
Christian Aero
Hobbs, N.M. Khob

Get Outlook for Android
I fully support proposed TIA 1539

Chris Rosenssteel
General Manager PBI
Signature Aviation

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Foran, Rosanne

From: Greg Karm
Sent: Saturday, November 7, 2020 11:53 AM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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“I support proposed TIA 1539”

May your intentions be overflowing with positive results.
GCK
Foran, Rosanne

From: Talbert, Jeffrey (SFS-CMH314)
Sent: Saturday, November 7, 2020 1:04 PM
To: Shared TIAs
Subject: NFPA 407

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Good afternoon,

Just a quick note to voice support for the enactment of TIA 1539. We appreciate your efforts.

Sincerely,

Jeff Talbert
General Manager
Signature Flight Support
Columbus, Ohio

Sent from my iPhone

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Foran, Rosanne

From: Hanna Crain
Sent: Saturday, November 7, 2020 3:16 PM
To: Shared TIAs

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I support proposed TIA 1539
To Secretary, Standards Council,  

We are a relatively small FBO here in St. Joseph, Mo and if faced with retrofitting our trucks and fuel farm with the proposed scully type fuel overflow shutoff devices ref.:S.1.12.4 NFPA 407 especially at this time, would likely cause us to shut down operations. Our equipment currently has overflow protection devices which have worked perfectly for many years. I have no problem with new devices on newly purchased equipment. I am all for safety in fueling operations but please let us do this new expensive requirement as new equipment is put online. Thank you for your consideration!

--

Gary Patterson
Express Flight Inc.
St. Joseph, MO KSTJ
Please be advised That we support the NATA submitted Tentative Interim Amendment (TIA) 1539 proposing an important change to NFPA 407- Standard for Aircraft Fuel Servicing - the national fire code adopted by most airports in the United States. Without the proposed change, airports and FBOs would be faced with a $6,000-$10,000 bill per fuel farm loading rack, and $2,500-$3,500 bill per fuel truck, as all equipment will be required to be retrofitted with automatic shutdown systems by June of 2021.

The proposed TIA 1539 would:
Provide relief to hundreds of general aviation airports and FBOs from the requirement that they retrofit their fuel farms and mobile refuelers with automatic shutdown systems (aka: “scully type” systems).

- Remove the retroactive nature of the current language in the NFPA 407, applying it to only new fuel farm/fuel truck installations.
- Allow airports and FBOs to continue safe operations using the high-level control devices already installed and required on all mobile refuelers, which when operated properly have a demonstrated history of reliability.

We are a small general aviation airport, cannot afford the NFPA proposed changes and feel that we currently have a more than adequate level of safety associated with aircraft refuelling.

Thanks for your attention,

Shaw Siglin
Grand Canyon Airport Authority
Wellsboro-Johnston Airport (N38)
Foran, Rosanne

From: Nunez, Juan (SFS-RDU)
Sent: Sunday, November 8, 2020 7:29 AM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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……… I fully support proposed TIA 1539.

Juan Nunez Gomez | Operations Supervisor
Signature Flight Support RDU | 1775 East International Drive | Morrisville, NC 27560
USPS address: PO Box 80125 | Raleigh, NC 27623

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Good morning,

I support this effort.

Regards,
Jamilah Beatrice
NATA Urges Industry to Comment on Proposed Change to NFPA 407

I support NATAs efforts to enact a temporary order regarding the use of automatic shut off for all fuel trucks and farms. This regulation is not only costly but unnecessary with proper training.

Andy Hatcher | Station Manager
Signature Flight Support IXD | 280 Gardner Dr New Century KS 66031

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To whom it may concern,

We fully support and encourage the technical committee to approve TIA 1539. We feel that the FBO industry’s current training and preventative measures in place are adequate to prevent fuel spills. This will save thousands of dollars in unnecessary costs during these unprecedented times.

Thank you for your consideration,

Andrew S. Robbins  
Duty Manager  
AUS

Signature Flight Support  
Austin-Bergstrom Int’l Airport  
4321 Emma Browning Ave  
Austin, TX 78719

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Good Afternoon,

After many years in the industry, I have found that proper training is a far superior preventative measure. Systems like these can lead to complacency and a failure to fully understand other fuel farm and mobile refueler spill prevention measures.

Best,

Derek Roth | General Manager
The Eastern Iowa Airport
9430 Shepard Ct SW | Cedar Rapids, IA
52404

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I fully support proposed TIA 1539

Marcus Carter
Operations Supervisor-MQS
Signature Aviation
I’ve worked in the industry for over 30 years and find that training is a superior preventative measure.

Thank you,

Wendy Cloud | Operations Supervisor
Gerald R Ford International Airport
5304 Ross Dr. SE
Grand Rapids, Michigan 49512

+ www.signatureflight.com

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I fully support proposed TIA 1539.

Michael Vinay | General Manager – FAY
3003 Control Tower Road
Fayetteville, North Carolina 28306

www.signatureflight.com
This is in no way the time to make changes of this caliber and cost, when as stated, the high level systems are reliable, and have been for years. Our industry has taken one of the biggest hits in history, both financially and in the public's confidence to fly. I believe the NFPA should seriously postpone this requirement, at least until we see who all makes it out of this terrible delima. Otherwise, you will have more layoffs and unemployment numbers through the roof, due to the cost of these upgrades and what it takes from the company itself. Those are my thoughts.

--
Travis Ragland
Fuel Supervisor/Ramp Compliance
Aero Industries, Inc.
I fully support proposed TIA 1539.

Steven Southworth | General Manager - FDK
330 Aviation Way
Frederick, MD 21701

www.signatureflight.com

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Please consider the environment before printing this email.
Foran, Rosanne

From: Moran, Jay (SFS-JAX)
Sent: Monday, November 9, 2020 8:22 AM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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I fully support proposed TIA 1539

Jay Moran | General Manager JAX

Signature Flight Support JAX | 14700 Yonge Drive | Jacksonville FL 32218

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Hello,

Yes, I support this proposal to provide relief to general aviation airports and FBOs.

Thanks,

Richard J. Ruditis
Venango Regional Airport (FKL)

From: Debbie Bowman
Sent: Friday, November 6, 2020 1:41 PM
To: dbowman@acpfly.com
Subject: Fuel Farm Auto Shutdown Requirement - Act today

NFPA (National Fire Protection Standards) is an ANSI Accredited Standards Developing Organization. NATA submitted a Tentative Interim Amendment (TIA) 1539 proposing an important change to NFPA 407- Standard for Aircraft Fuel Servicing - the national fire code adopted by most airports in the United States. Without the proposed change, airports and FBOs would be faced with a $6,000-$10,000 bill per fuel farm loading rack, and $2,500-$3,500 bill per fuel truck, as all equipment will be required to be retrofitted with automatic shutdown systems by June of 2021.

The proposed TIA 1539 would:

- Provide relief to hundreds of general aviation airports and FBOs from the requirement that they retrofit their fuel farms and mobile refuelers with automatic shutdown systems (aka: “scully type” systems).
- Remove the retroactive nature of the current language in the NFPA 407, applying it to only new fuel farm/fuel truck installations.
- Allow airports and FBOs to continue safe operations using the high-level control devices already installed and required on all mobile refuelers, which when operated properly have a demonstrated history of reliability.

Your help is needed to pass this TIA which is currently open for public comment. Passage of the TIA requires three-quarters vote from the technical committee overseeing NFPA 407.

We’ve heard from a number of our members on this issue, but more help is needed. We encourage all stakeholders to contact the NFPA and the 407 Technical Committee letting them know you support proposed TIA 1539. Make your voice heard, submit your comments to tias_errata_fis@nfpa.org before November 9th, 2020.
This electronic message and its attachments may include information from Venango County that is confidential and may be protected under Federal and/or State law. This information is intended to be for the use of the intended addressee only. The improper use of this information is prohibited. If you have received this e-mail in error, please notify us by telephone at (814) 432-9126 immediately or by e-mail at kkoypack@co.venango.pa.us so that we may arrange for the appropriate retrieval of this document at no cost to you.
Good Afternoon,

My name is Richard Casler. I am the General Manager of Lubbock Aero, the Fixed Based Operator (FBO) at Lubbock Preston Smith International Airport (KLBB).

I am writing to express my strong support for NATA’s Tentative Interim Amendment (TIA) 1539, proposing an important change to NFPA 407.

Our FBOs would shoulder an unreasonable burden if the retroactive requirement for retrofitting our fuel farms and mobile refuelers with automatic shutdown systems is not adjusted. Each of those systems already have emergency shutdown systems.

At a time when our business has seen month to month declination in fuel sales between 20% and 80 %, this is an ill-timed and ill-advised proposal.

Many in our industry relied upon the Payroll Protection Program and the Payroll Support Program to meet the needs of our employees and avoid layoffs.

Should the proposed rule pass without TIA 1539 modifications, our company will face estimated costs near $100,000 to comply. Furthermore, those expenditures would be required within six months, during a time when exhaustion of PPP and PSP dollars will have taken place.

If the rule passes, vendors who can complete the modifications in such a short time will become overwhelmed, creating a back log similar to the ADS-B Requirements, which still continues today.

Additionally, I have seen no data which supports the need for automatic shutdown systems. Fuel farm and refueler fires are extremely rare. In fact, in 30 years of operation at Lubbock Aero, we have never had a fuel truck/fuel farm fire or significant fuel spill that exceeded the design of a manual shutdown system.

Respectfully,

Richard Casler

Providing Excellence in Aviation

Vice President/General Manager
6304 N Cedar Ave
Lubbock, TX 79403
Hello,

I am in support of the Proposed TIA 1539. Current regulation, practices, procedures and training are extremely effective. There is no need to add any additional safeguards fuel systems and trucks. This is an unnecessary financial burden to an already strained industry.

Thank you,

Glenn Rack | Duty Manager – HSE & GSE
DAL
8001 Lemmon Ave.
Dallas, TX. 75209

+1 www.signatureflight.com

Please consider the environment before printing this email.
Comment No. 240
SUPPORT


This TIA needs to be passed.

Thank you for your attention to this matter,

Joseph Marthaler

Director of Operations, Jet Air LLC
4700 Airport Road
Cincinnati, OH 45226
TIA 1539:

I’m hopeful that the mandatory Scully or like type of fuel farm/truck additions will receive an amendment to the process. In my 25+ years in aviation, I have found that proper training of use of pre check valves, having a calculated add for what one should be putting into a truck, and when to stop the flow of fuel if in doubt. This type of expense would be devastating to smaller FBO’s around the country. My location is in the process of adding such system to ensure it is done prior to the deadline as waiting too much longer would not allow ample time for install if a change is not made. That said, this expense is $50K for our location assuming we don’t have any issues or need to add anything else. Further, these additions are being installed on farms that are going to be needing replaced in the next 5 years or less.
Hello,

I fully support proposed TIA 1539.

Thank you,
John Harrison – General Manager
Signature Flight Support LFT
123 Grissom Dr
Lafayette, La 70508

www.signatureflight.com
To whom it may concern,

The Pensacola International Airport supports NATA’s proposed TIA to remove the retroactive nature of the current language in the NFPA 407, Chapter 5.1.12, applying it to only new fuel farm/fuel truck installations. As the owner and operator of the airport, the cost associated to conform to the regulation puts an undue burden on the airport and our fueling agency partners as we continue to deal with the financial shortfalls from COVID-19 impacts. The aviation industry would be better served by making this requirement apply to only new fueling facilities and fuel truck installations, thus providing airports and fueling agencies the ability to plan and fund this requirement for future projects.

Sincerely,

Byron Burkhart, CM  ACE
Assistant Airport Director
Pensacola International Airport
I fully support proposed TIA 1539.

Chelsea Hayes - Duty Manager
Signature Flight Support LFT
123 Grissom Dr.
Lafayette, La 70508

www.signatureflight.com
All,

I support the TIA 1539 and encourage the technical committee to approve the temporary Interim Amendment.

Signature Flight Support is a leader in the fueling business worldwide and we maintain the highest level of Fuel QC and spill prevention. Our procedures in these matters are strong as is our record of success.

While we always look for ways to improve as new data becomes available and will include necessary systems on new equipment, the retrofit of old equipment across our extensive network would potentially create a lack of availability of parts and man power to make the necessary changes. It would create a financial hurdle at such a fragile time in our industry.

This interim amendment is a reasonable step to allow all of us to recover and mature as an industry while still making incremental increases is the level of safety.

Thank you for your time.

Brian Batty | Director, Fuel Operations
Signature Flight Support CHQ | 13485 Veterans Way | Orlando FL 32827

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I am in support of “The proposed TIA 1539”, without the proposed change would be a detriment to already hurting industry due to COVID19.

Thanks for Choosing Your Signature Dallas.

Roy Stout | Duty Manager
8001 Lemmon Ave
Dallas, Texas 75209

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The Moore County Airport (SOP), NC is in support of the Proposed TIA 1539.

We have been conducting fueling operations at this airport safely and successfully for many years and millions of gallons of fuel.

Being required to install all the new protection devices would create an unfunded mandate in a tight budget year due to Covid-19 and is not currently in our budget.

Again, we support the Proposed TIA 1539.

Respectfully,

Scotty

Scott Malta, A.A.E., C.A.E., Capt. USAF (Ret.)
Airport Manager
Moore County Airport
7825 Aviation Dr.
Carthage, NC 28327
I fully support proposed TIA 1539

Carlos Maturell | Operations Supervisor
123 Grissom Dr
Lafayette, LA 70508

www.signatureaviation.com

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Please consider the environment before printing this email.
To whom it may concern,

The purpose of this email is to oppose the new requirements for NFPA 407 for those that have the below processes and equipment in place:

- Currently installed high level shutoff devices on all refuelers operated by air or hydraulic processes to prevent overfill.
- Proper and current training for all AFQC and LST’s
- Procedures in place and followed for overfill protection. i.e. calculated adds, known quantities and volumes.

Scott Grubbs | General Manager – MAF/SPS

Signature Aviation | 9500 North Service Road | Midland, TX. 79711
Foran, Rosanne

From: Foran, Rosanne
Sent: Monday, November 9, 2020 10:25 AM
To: Shared TIAs
Subject: Comment on Proposed TIA 1539 on NFPA 407

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We are an airport and sponsored owned FBO with multiple fuel farms and refueling vehicles.

Please accept this correspondence as support for the TIA 1539 associated with NFPA 407. New systems, not existing fuel systems should be the focus of these changes proposed in NFPA 407.

Thank you for your review of these comments.

JEFF BILYEU, AAE | Aviation Director
Texas Gulf Coast Regional Airport |
8000 Airport Way, Angleton, Texas 77515
www.flylbx.org

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Foran, Rosanne

From: Sykes, Justin
Sent: Monday, November 9, 2020 10:54 AM
To: Shared TIAs
Subject: Comment on Proposed TIA 1539 on NFPA 407

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There is a consideration to amend NFPA 407 to have all fuelers install the "scully" type system on their trucks and fuel farm. This is very costly of course. Our normal practice is to use the "calculated add" method to ensure we are withing parameters when topping off the trucks. We have been doing this for quite a few years with great success. Training is key to any fuel farm operation.

Please do not add the requirement for a scully system.

Thank you,

Justin Sykes | Duty Manager BKL
Signature Flight Support | 1571 N. Marginal Rd | Cleveland, OH 44114
I fully support TIA 1539

Rick Muse

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I support the proposed TIA 1539

Thanks,

Jeffrey Buzzell | Station Manager - MKE
923 E Layton Ave
Milwaukee, WI 53207

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I support.

**Steve E. Andrasic | Operations Supervisor**
923 E. Layton Ave
Milwaukee, WI 53207

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Foran, Rosanne

From: Raguseo, Pasquale (SFS-TEB)
Sent: Monday, November 9, 2020 12:14 PM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

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I fully support proposed TIA 1539

Pasquale Raguseo
Director
Northeast Region

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.
I want to voice my support for the Tentative Interim Amendment 1539.

As an FBO operator, we currently have control devices on the trucks and tanks with a strong history of reliability. Not implementing TIA 1539 would be a tremendous burden on strapped cities, counties and other FBO’s across the country when a strong system of safety and controls already exists.

We would sincerely appreciate the technical committee's support and passing of TIA 1539.

Feel free to call if you have any questions or comments.

Kindly,
Shelly

Shelly deZevallos, Ed.D.
President, West Houston Airport
PO Box 941789
Houston, Texas 77094

“The bad news is time flies...the good news is you’re the pilot.”  Michael Altshuler
Foran, Rosanne

From: Gary Kobes
Sent: Monday, November 9, 2020 12:24 PM
To: Shared TIAs
Subject: NFPA 407

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Please accept this email in support of the NFPA 407 TIA. The Port of Astoria operates a two tank fuel farm and a refueling station. We support the 407 intent for new fuel farms but find the cost to be unwarranted on existing farms.

Respectfully,

Gary Kobes
Airport Manager
AST (Port of Astoria Regional Airport)

Sent from Mail for Windows 10
Proposed TIA 1539

In favor.

-Chauncey Phebus
I support the proposed TIA 1539. Thank you.

Best Regards,

Darryl Graham
Flightways Columbus (FBO @ KCSG)
3250 West Britt David Road
Columbus, GA 31909

Sent from Mail for Windows 10
From: Andrew Hartman  
Sent: Monday, November 9, 2020 1:01 PM  
To: Shared TIAs  
Subject: TIA 1539

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I support TIA 1539.

Sincerely,

Andrew Hartman  
Managing Member  
2 N Main Street  
Ste 302  
Medford NJ 08055
I am writing in support of NATA's proposed changes as outlined in the TIA 1539.

We are a very small County run airport in south west New Mexico. My staff and I - four of us in total - also run the airport's FBO. These proposed changes and the costs associated with retrofitting our fuel farm and fueling trucks would be financially impossible unless we were to receive grant funding. Our County government is suffering great financial hardship, as most are, as a result of high unemployment, reduced gross receipts revenue and ongoing costs of addressing the COVID virus. There are no extra funds available to make these retrofits if required. Moreover, we have never had a circumstance where we have needed an automatic shutdown system.

I strongly urge support of TIA 1539.

Thank you,
Rebekah Wenger, C.M.
Grant County Airport Manager
Foran, Rosanne

From: Daniel J. Piper
Sent: Monday, November 9, 2020 1:06 PM
To: Shared TIAs
Subject: Auto shutdown unnecessary.

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This amendment will create a dangerous condition of overriding the operator. Safeguards already in place address the possible scenarios in a more- than adequate manner.
Line Service Supervisor for more than 20 yes.
Daniel Piper.
As a small FBO owner, I am in favor of TIA 1539. Small FBO's such as mine can ill afford more costs associated with running an FBO. Please pass TIA 1539.

J. Randy Hoffman, Owner
Scotland Aero Services, Inc.
FBO at MEB
From: Graham Stephenson
Sent: Monday, November 9, 2020 1:16 PM
To: Shared TIAs
Subject: NFPA 407

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Please Pass Proposed Change to NFPA 407

Graham Stephenson
Good Afternoon,

My name is Colin Riccobon, Director of Public and Government Relations for the Lehigh-Northampton Airport Authority (LNAA) and am writing to you in support of proposed TIA 1539.

The LNAA operates Lehigh Valley International Airport (ABE) and two general aviation facilities – Queen City Airport (XLL) and Braden Airpark (N43).

We support the Aviation Council of Pennsylvania (ACP) assessment to require all existing load racks and mobile refuelers to be retrofitted with automatic shut off systems creates an unreasonable financial burden while doing little to reduce actual risk.

The overfilling of mobile refuelers is not something that occurs with such frequency as to prompt the excessive and costly regulatory enforcement that the current language in section 5.1.12.4 mandates. All at a time when our industry is already hurting from the impacts of this global pandemic.

Safety standards and mechanical safeguards are already in place which prevent the overflow of mobile refuelers and we strongly encourage the NFPA to approve TIA 1539.

Thank you for any consideration. Please let me know if you have any additional questions.

Have a great day!

Colin Riccobon
Director of Public and Government Relations
Lehigh-Northampton Airport Authority
3311 Airport Road | Allentown, PA 18109

www.flyabe.com

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Good Afternoon,

On behalf of York Aviation Operator’s Inc. and the York Airport, I am sending this communication to inform the NFPA and the 407 Technical Committee of our support of TIA 1539. While we always strive to conduct operations in an environmentally safe and clean manner, the costs associated with this modification to our fuel farm and refuelers will be an incredible burden to our operation. As a privately-owned, public use airport, we are at a great disadvantage compared to our municipality-owned peers in terms of attaining funding to complete these types of equipment upgrades. We will make every effort to comply with this regulation, but would appreciate more time for compliance.

Thanks for your consideration!

-Mark

Mark Tomlinson
Operations Manager
York Aviation Operators, Inc.
6054 Lincoln Highway West
Thomasville, PA 17364

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Foran, Rosanne

From: Carl Adkins
Sent: Monday, November 9, 2020 1:24 PM
To: Shared TIAs
Subject: Support for TIA 1539

Good Afternoon,

I am the General Manager of a small FBO in Pennsylvania and speaking for myself and I feel many FBOs that are similar to the one I manage, I am asking you to agree to TIA 1539.

As you know the COVID pandemic has hurt our business tremendously. With the uncertain future caused by the pandemic and the fact that we still do not have the business recovering as fast as we had hoped to have, and to put out $20,000 to $30,000 dollars to become compliant in our budget for next year, I find an unreasonable request.

At CXY we are governed by the Susquehanna Regional Airport Authority, which does quarterly inspections of our fuel equipment. Overfill protection is already on our trucks and farms. Should our overfill protection not be working the Authority would insist that the truck be taken out of service until it is fixed.

The Overfill protection on our trucks is checked every time we put fuel into our truck. Our policy at Skyport Holdings Harrisburg LLC is to automatically take the truck out of service if the overfill Pre-Check system does not work.

I have spent 20 years in this business, 17 years at Harrisburg International Airport’s FBO and the last 3 + at Capital City Executive Airport have could count on one my hand the number of times the overfill protection has failed to work. Using that information and while at MDT we had 5 trucks that were topped off at least twice a day, so that would equate to approximately 62,050 fueling events, at CXY we have three trucks which we usually top off at least two of them every day for another 2190 events. That is approximately 64240 total events and to have less than 10 failures in my career would equate to 0.00016116035 rates of occurrence.

However, even with this rare chance of failure, I do understand that if new technology is present then why not obtain it at some point. May I suggest you change the requirement to when you get a new fuel truck it would have to be equipped with the new spill prevention system? If you upgrade your fuel farm by more than 50% you would have to add the new technology?

Also, keep in mind that most airports, while owning the fuel farm, will not assist in the cost of complying with this new regulation. Even if they would, we have already been told by the FAA and BOA that funding for such projects will be extremely tight for airports. This will leave the sole burden of cost on the shoulders of the FBOs, who by the way, did not get Cares money and yet were required to stay open and provide services.

Please understand I am not opposed to the new requirements it is just to have a requirement to be implemented all at one time is not practical for anyone involved.

Thank You,
Carl Adkins, General Manager
Capitol City Executive Airport CXY
112 Airport Drive
New Cumberland, PA 17070
My name is Terry P. Sroka and I am writing to you on behalf of Reading Regional Airport in support of proposed TIA 1539. To require all existing load racks and mobile refuelers to be retrofitted with automatic shut off systems creates an unreasonable financial burden while doing little to reduce actual risk. The overfilling of mobile refuelers is not something that occurs with such frequency as to prompt the excessive and costly regulatory enforcement that the current language in section 5.1.12.4 mandates. All at a time when our industry is already hurting from the impacts of this global pandemic. Safety standards and mechanical safeguards are already in place which prevent the overflow of mobile refuelers and we strongly encourage the NFPA to approve TIA 1539.

Terry P. Sroka
Airport Manager
RDG
To Technical Committee

It is of great concern to business aviation that [TIA] 1539 proposal pass in order to change NFPA 407. Placing a financial burden on aviation business during this difficult time would be devastating.

This additional expense would hurt aviation business that are already hurting during this pandemic.

I have been in the aviation business for 35 years and worked for other aviation companies with a total of 44 years.

During this time we have never had any fuel spills or accidents. Training with NATA has made us a much safer work place and feel that our actions speaks louder than our words.

I appreciate your consideration during these difficult times.

Thank you,

Rodger Pridgeon
President
3450B Airport West Drive
Vero Beach FL 32960
To Whom It May Concern:

In reading of the proposed TIA 1539 this would be of great help to the Mid-Ohio Valley Regional Airport (PKB). The cost of this "Scully Type System" it would cost the airport a considerable amount of money when profits are down do to COVID. This should be done when we update our fuel farm with new equipment. We estimate that this update would cost us over $5,000 for fuel trucks plus fuel farm tank work over $16,000 and $6,200 for grounding system. This is to retrofit a fuel farm that's from the 1990's which brings total to nearly $30,000 when the airport can least afford it.

This is not a cheap fix for any airport it. It would make much more financial sense to do this when we install a new fuel farm.

THE MID-OHIO VALLEY REGIONAL AIRPORT (PKB) SUPPORTS PROPOSED TIA 1539.

Respectfully,

Glen Kelly
Airport Manager
Mid-Ohio Valley Regional Airport (PKB)

*****Visit our website at FlyMOV.com and check us out on our Facebook page – Mid-Ohio Valley Regional Airport – for PKB news and updates.*****

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I support the TIA 1539 submitted by the NATA to avoid the expense caused by retrofitting existing fuel loading systems to comply with NFPA 407-2017 and proposed 2022 Editions 5.1.12.1 through 5.1.12.3. I do not object to the additional requirements for the installation on new installations or sites.

Regards,

Ron Ruocco
Chief of Maintenance
The Hertz Corporation
404 Citation Point, Naples FL 34104
My name is David Wright, Manager and am writing to you on behalf of Somerset County Airport in support of proposed TIA 1539. To require all existing load racks and mobile refuelers to be retrofitted with automatic shut off systems creates an unreasonable financial burden while doing little to reduce actual risk. The overfilling of mobile refuelers is not something that occurs with such frequency as to prompt the excessive and costly regulatory enforcement that the current language in section 5.1.12.4 mandates. All at a time when our industry is already hurting from the impacts of this global pandemic. Safety standards and mechanical safeguards are already in place which prevent the overflow of mobile refuelers and we strongly encourage the NFPA to approve TIA 1539.

Sincerely,
David Wright
Dear NFPA 407 Committee,

First, a personal thank you for the commitment each of you have made to promote aviation fuel handling safety. As a participant on committees and boards myself, it is not without effort and we all appreciate your sacrifices.

TIA 1539 is a proposal which has my complete support. The aviation industry as a whole recognizes safety is paramount but suggest the specification section 5.1.12 is untenable.

Basic risk analysis suggests that with increased frequency come increased likelihood. Applying this to top offs, say O'Hare say has 100 truck top offs a week. For every ORD there are there are 5 airports that top off trucks <24 times a YEAR!! Is the risk the same? No. The large commercial airport cannot be considered the same, not from any metric, and yet we try to apply those same rules.

As written, this section unduly put burden on THOUSANDS of small airports, bulk consumers and others that simply cannot, do not and may not be able to comply until time comes for new fixed fueling infrastructure. Many of these airports are presently faced with putting in these systems at or near the end of the fuel farm’s useful life. Are we to make them retrofit systems to simply discard them in years to come and likely 2X purchase? What’s the penalty for non-compliance? We aren’t talking TEB, VNY, IAD and others here…. We are talking about that tiny airport you have down the road that has no budget, is going to look to you the taxpayer.

Many I have spoken with are weighing their options to return to TOP LOADING!! Yikes! Talk about a hazard.

Fuel suppliers such as WFS, Titan, Avfuel and others instead of being able to design refueling fleets uniformly, now will need to mix, match, retrofit, remove, replace to accommodate the needs of our customers, which are great in number. Invariably there will be countless variants of automatic shutdown that the large fleet owners will need to cater to when deploying new trucks, re-leasing existing assets, etc….at various airports/customers. Of course when the trucks arrive, the systems will not mate, ground, something to cause a second visit to the airport by a vendor. When it is learned they can be over-ridden, they will be.

Fuel supply emergency response situations will be compromised. WFS and our peers are constantly moving refueling equipment around the west to meet the needs of fire teams at airports. “No, your truck needs to go to the shop because ABC airport has a Scully and XYC has an OPW. It will be only be a few days.”
I have had the opportunity to work within many different frameworks in the industry from line service to private wholesaler of fuel now to public World Fuel Services. Most of the regulatory progression in that time has been for the better with immediate, resounding effects. Section 5.1.12 is none of this.

Even truck builders are not sure what to do. Section 6.1.3.12.2 seems to allow (2) truck-mounted options.

Really think this is just not fully cooked. Please consider automatic overfill prevention protection to not be retroactive and allow on AIRPORT operations to be managed LOCALLY to the refueling vehicle. Put the costs on those who can absorb it over longer term while simplifying an already very regulated industry.

It is my recent understanding the ¾ majority vote was not realized, only obtaining 16 of the needed 18 votes for ¾ majority. It is also my understanding that (6) 407 Committee members have not voted so hope remains that TIA 1539 will be accepted.

Thank you,

Reed Fuller CPP
Manager, QA and Product Integrity
Global Physical Operations (Aviation)

World Fuel Services
One Mill Street
Parish, NY 13131
USA

You can prevent misfueling!!

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Good Afternoon –

I am writing in support of this TIA.

This would be a costly retrofit for all FBO’s across the country already compounded by the ongoing affects of the COVID-19 pandemic. I cannot speak of other FBO procedures, but Signature as a whole has human intervention procedures already in place including “calculated add” that ensure overfilling of trucks does not occur, especially when Scully types of systems fail.

As with all mechanical devices, they can and do fail. By requiring these systems on all equipment would introduce another human factor of complacency as the operator will assume that the shutoff will work. Unfortunately, the requirement of mechanical systems does not substitute proper training and concrete procedures where a human can intervene before a problem occurs.

Thank you for your consideration and comment in support of this TIA.

Kind Regards,

Sean A. Kuhl | Station Manager
Signature Flight Support | Des Moines International Airport | 5600 Fleur Drive | Des Moines, IA 50321

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I fully support proposed TIA 1539

Jessica Packard | Airline Services Manager
Signature Flight Support RDU | 1775 East International Drive | Morrisville, NC 27560
USPS address: PO Box 80125 | Raleigh, NC 27623

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Hello,

I am in support of the Proposed TIA 1539. Current regulation, practices, procedures and training are extremely effective. There is no need to add any additional safeguards to fuel systems and trucks. This is an unnecessary financial burden to an already strained industry.

Thank you,

Martin Merfeld
Fuel Quality Control Technician
Signature Flight Support
8001 Lemmon Ave

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.
I support the TIA1539 and hope this will pass because of the shut downs and furloughs causing hardships among many of us. I believe this will be welcomed into the industry, but not currently because of financial reasons, and there is always room for improvement to our current systems. I work with Signature Flight Support at OGG as the GSE Maintenance Manager John Spikes

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.
I am in agreement with the proposed TIA Log 1539 and support the changes with some caveats at the end of this public comment.

The primary system of defense against overfills during refueling should be and is the operating procedures which address awareness of liquid levels, awareness of ullages, and estimated delivery finishing times as well as level awareness (i.e. these are the requirements spelled out in 407 5.1.9). As a backup to the primary system most facilities have level devices to indicate where the level is, either visual, simple or sophisticated level indication. The reliability of these systems is dependent on owner/operator maintenance and operator training and awareness. In addition, the risk of a spill is based on the rate and frequency of fills for the most part. The smaller operators with low rate/frequency as at less risk that overfill that high rate/high frequency operations. While I agree that new systems should implement this requirement, it is unusual to eliminate grandfathering provisions unless there is an immediate and prevalent safety issue. While there is undoubtedly a potential safety issue, there does not appear to be numerous incidents directly resulting from not having these systems in place. If I saw data that showed overfills are occurring at a substantially higher rate with manual fill systems, than with systems that meet the provisions of the proposed 407 text, then my opinion could be changed. I would like not just anecdotal data of a few incidents, but sufficient stats to show that there is indeed an increased safety problem if this language is not incorporated right away.

As a compromise, I would suggest that lower maximum fill levels be required for systems that do not have the automated shutdown based on the lessor of some time (like 5 minutes) or percent ullage (such as 80% max), until such time as the auto shut down systems are installed. This would have the effect of motivating operators who do not have these controls to eventually upgrade, which I think, in the long run we all want to see.

The other compromise could be an increased upgrading time – say 10 or 15 years.

Philip Myers
Dear Sirs,

As the General Manager of Flyby Air, a family owned FBO in Holland, MI (KBIV) with two fuel trucks and two fuel farms, I strongly support TIA 1539 and urge you to approve the TIA. The cost of retro fitting our equipment would put an incredible strain on our already devastated financial situation. We have not yet recovered from the economic shutdown we endured this past spring and aviation traffic is again slowing due to the current spike in COVID-19 cases. We are planning on upgrading our fuel farms in 2022 to above ground and that would be the perfect time to include the new automatic shutdown systems.

Thank you for your consideration.

Kind regards,

Michael Krzciok
General Manager
I have been in aviation for over 35 years and I fully support TIA 1539. Adherence to ATA-103, calculated adds, FAR139, local and national fire codes and other auto-shutoff devices combined with significant training and re-current training for fueling personnel surpasses the need for the proposed amendment to NFPA 407.

Doug Drescher  | Director – FBO Operations
Signature Flight Support Corporation

www.signatureflight.com
Good Afternoon,

I operate a small FBO, Sky Bright, in Laconia, NH (KLCI). I am in support of the Tentative Interim Amendment (TIA) to the national fire code adopted by most airports in the U.S.

The proposed change [TIA 1539](#) seeks to remove the requirement for hundreds of general aviation airports and FBOs to retrofit their fuel farms and mobile refuelers with automatic shutdown systems. NATA’s proposed TIA removes the retroactive language in the current NFPA 407, and instead applies it to only new fuel farm/fuel truck installations. Without the change proposed by NATA, airports and FBOs would face bills of up to $10,000 per fuel farm loading rack and $2,500 to $3,500 per fuel truck, with all equipment required to be retrofitted by June 2021.

Thank you for taking my thoughts into consideration.

Lee Avery

--

Lee Avery
Sky Bright – Laconia’s Premiere Full-Service FBO
ALL,

TOL Aviation, Inc. a long standing FBO since 1980 at Toledo Express Airport (KTOL) strongly supports the NATA submitted TIA 1539 proposing a change to NFPA 407.

Thank you,
Richard Nensel, President
To whom it may concern,

Please accept this as my support for the proposed TIA 1539. The cost of retrofitting existing equipment is an unnecessary burden especially at a time when every dollar counts.

Thank you.

Please take a moment to complete the City of New Braunfels Customer Satisfaction Survey.

Dr. Robert Lee, AAE
Airport Director | Airport
2333 FM 758 | New Braunfels, TX 78130
| www.nbtexas.org/airport

This email, plus any attachments, may constitute a public record of the City of New Braunfels and may be subject to public disclosure under the Texas Public Information Act.
November 9, 2020

To Whom it may concern;

My name is William E. Verfuss, PE and I serve in the role of Airfield Practice Leader at McFarland Johnson, Inc. a national airport engineering firm. I am writing to you on behalf of McFarland Johnson, Inc, and our airport clients, in support of proposed TIA 1539. To require all existing load racks and mobile refuelers to be retrofitted with automatic shut off systems creates an unreasonable financial burden while doing little to reduce actual risk. The overfilling of mobile refuelers is not something that occurs with such frequency as to prompt the excessive and costly regulatory enforcement that the current language in section 5.1.12.4 mandates. All at a time when our industry is already hurting from the impacts of this global pandemic. Safety standards and mechanical safeguards are already in place which prevent the overflow of mobile refuelers and we strongly encourage the NFPA to approve TIA 1539.

Sincerely,
McFarland Johnson, Inc.

[Signature]

William E. Verfuss, PE
Airfield Practice Leader
To Whom it May Concern;

I am writing this message on behalf of Jet Aviation in support of the proposed TIA 1539. Our business is under extreme pressure related to the COVID-19 pandemic and this retrofit of existing tanks and equipment will cause an undue financial burden. We have had no overfill events with our fuel farms or refuelers across multiple locations.

The risk that this retrofit will reduce is already considered as low as reasonably possible through extensive training and safety procedures, making this an unnecessary step. In addition, we are audited against the NFPA 407 Standard on a regular basis by the local fire authorities, voluntary outside auditing firms (IBAC), and our own Safety Management System internal audits.

We urge you to please adopt this TIA.

Jet Aviation
Kevin Donnelly
Director Quality, Security and EHS FBO
112 Charles Lindbergh Drive
Teterboro, NJ 07608 / United States

www.jetaviation.com
Sun Air Jets, LLC, operating out of Camarillo Airport, KCMA, supports the National Air Transportation Association (NATA) proposed edits to TIA Log 1539 regarding NFPA 407.

Sincerely,

Brian Counsil
Hello,
I fully support proposed TIA 1539

Pablo Navarrete
General Manager TEB
Signature Aviation

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.
Please note I support the proposed TIA 1539.

I run three busy FBOs in Los Angeles, Honolulu and Seattle areas. I have a fleet of 13 fuel trucks and four fuel farms.

Not doing this will cause substantial unbudgeted costs at a time when my locations are struggling significantly to keep people employed and to minimize our losses.

Thank you for reading and supporting.

**Tony L. Marlow**  
President - Aviation Operations & Business Development  
155 Kapalulu Pl. Honolulu, HI 96819 | CastleCookeAviation.com

Confidentiality Notice: The information contained in this message and any attachments may contain confidential or proprietary material and is intended solely for the use of the person or entity to which it is addressed. Any unauthorized review, use, disclosure or distribution of this communication is strictly prohibited. If you have received this communication in error, please immediately notify the sender by reply e-mail and destroy all copies of this communication and any attachments.
My name is _____ and am writing to you on behalf of _________ in support of proposed TIA 1539. To require all existing load racks and mobile refuelers to be retrofitted with automatic shut off systems creates an unreasonable financial burden while doing little to reduce actual risk. The overfilling of mobile refuelers is not something that occurs with such frequency as to prompt the excessive and costly regulatory enforcement that the current language in section 5.1.12.4 mandates. All at a time when our industry is already hurting from the impacts of this global pandemic. Safety standards and mechanical safeguards are already in place which prevent the overflow of mobile refuelers and we strongly encourage the NFPA to approve TIA 1539.

[Signature]

11-9-20
Dear Sir,

I am in support of the proposed TIA1539. Without the proposed TIA it would cause an unnecessary and frankly unneeded financial burden across the General Aviation industry.

Respectfully,

GC Stickel
Dolphin Aviation
On behalf of Western Aircraft, I write to lend our support to Proposed TIA 1549. We encourage the Technical Committee to approve the TIA as not justified either financially or logistically.

As an FBO at the Boise Airport, Western Aircraft provides fuel to the major commercial airlines at BOI, along with business and general aviation aircraft.

To perform this work, Western Aircraft utilizes 2 loading racks and 7 fuel trucks, so without the change, we can expect to incur costs of between $35,000 - $45,000.

As you can imagine, our operations have been impacted by the reduced travel caused by the COVID-19 pandemic, and bearing these additional costs will have a further negative impact.

We feel that retroactive compliance with this requirement is overly burdensome on the refueling industry and should therefore be removed.

Please contact me if you have any questions.

Respectfully,

Peter

Peter Woodke
Contracts Manager
Western Aircraft
Dear NFPA Technical Committee,

I am writing pursuant to the proposed Tentative Interim Amendment (TIA) 1539 from NATA. Representing one of the largest General Aviation operations in the country at Van Nuys Airport, I would like to express my complete support for this amendment and ask that it is given due consideration with respect to industry stakeholders. I fully trust the NATA and their guidance as it has ensured our operations have provided safe and reliable service to our customers and employees.

Thank you for your time and for reviewing the merits of this amendment.

Regards,

Niall Mulcahy, C.M. | General Manager
Van Nuys Airport (VNY)
7240 Hayvenhurst Place
Van Nuys, CA 91406

www.signatureflight.com

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.
Aloha,

I have been with the company for over 10 years and find that the high-level control devices is reliable.

Mahalo nui loa!
Santee Evangelista | OGG - Operations Supervisor Kahului International Airport
25 Kuhea Street
Kahului, HI 96732
Good Morning,

I realize the date to reply was yesterday but I still wanted to give my input. I/we support the TIA 1539 amendment that the “scully” type system should be directed towards new construction or fuel storage facilities and aircraft fueling vehicles.

Thank you for your understanding and I am available to discuss in further detail if needed.

Michael Leddick
KSAV Fuel Storage Facility Lead
On behalf of GAI Consultants and the Clearfield-Lawrence Township Airport Authority, we Concur with TIA 1539.

Brian R. Wolfel, P.E.
Engineering Manager
203 W. Weber Avenue, DuBois, PA 15801-1859
This comment is reference to the new Skully system. I would please ask all involved in implementing this new system to please take in consideration the financial ramifications that we the small airport operators will have to consume. I understand how long this retrofitting endeavor has been published to the public, and we have vigorously tried for the last 2 years to put this project in our budget, but the cost of this system is just too much for our operations. This company “JAG Aviation Inc” is a small operation that leases building space from the City of McGregor. We pay high lease agreements, and also into plane fees to the city to stay on the field. We sell around 200,000 gallons of Jet fuel, and around 40,000 gallons of Avgas a year. For me, as a Line Service manager overseeing all the preventative mx and trouble shoots that a fuel truck and fuel farm can bring, I can understand the cost and how quickly the bills can stack up for I am the one who orders the parts. Most of these items, I have learned to repair or replace on the trucks or fuel farm over my 21 year tenure in this industry. This system would be a “hire the big guys” to take care of. We will not be able to afford this. As many other small operating FBO’s around the United States that have lost so much money thru the Covid 19 pandemic, we have had meetings about a possible closure. I do love the idea of the Skully system, but we would not be able to afford something like this. The other bit of information is that we only order fuel when we are down to the last 6 to 10 inches on the tanks. This should give you a little more insight into how small operations work. This is a “SELL THE LAST LOAD BEFORE YOU BUY ANOTHER” kind of operation. I will never get to the 90% ullage of a 12,000 gallon tank. My tank alarms are inspected as you require and have never had issues replacing batteries and testing. I want to Thank you guys for all your direction and advice into the daily operations that FBO’s go through to make us compliant and operate safely for our employees and passengers.

Much Appreciated !!
Brad Athey
JAG Aviation Inc
McGregor Texas
KPWG

Brad Athey
Director of Fuel Sales

Jag Aviation, Inc.
357 McGregor Airport Road
McGregor, Texas 76657

McGregor Executive Airport
Foran, Rosanne

From: Dave Ruppel
Sent: Tuesday, November 10, 2020 6:11 PM
To: Shared TIAs
Subject: NFPA 407
Attachments: CAOA Letter supporting NATA TIA 1539, 2020611.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

CAUTION: Always use caution when opening attachments. Make sure you know the sender and are you expecting one.

Please add this letter of support to this action.

Thanks,

Dave Ruppel

David E. Ruppel | Director, Air and Space Port
Adams County, Colorado | 5200 Front Range Parkway | Watkins, CO 80137
| www.coloradoairandspaceport.com | www.adcogov.org
November 6, 2020

Attention to NFPA and the 407 Technical Committee

Re: Tentative Interim Amendment (TIA) 1539 proposing an important change to NFPA 407- Standard for Aircraft Fuel Servicing

Dear Members of the NFPA, 407 Technical Committee,

The Colorado Airport Operators Association (CAOA) serves the common interests of the owners, operators, and users of the 74 public use airports located throughout the State of Colorado. CAOA provides a unified voice for airport operators to State and Federal agencies, the General Assembly and the Congress of the United States of America, on proposed or pending legislation and regulations.

We are writing to you specifically concerning Tentative Interim Amendment (TIA) 1539 submitted by NATA proposing important changes to NFPA 407- Standard for Aircraft Fuel Servicing. Without the change proposed in the NATA TIA, we are concerned that Colorado airports will be faced with thousands of dollars in costs to retrofit fuel farm loading racks and fuel trucks.

The proposed TIA 1539 would:

- Provide relief to hundreds of general aviation airports and FBOs from the requirement that they retrofit their fuel farms and mobile refuelers with automatic shutdown systems (aka: “scully type” systems).
- Remove the retroactive nature of the current language in the NFPA 407, applying it to only new fuel farm/fuel truck installations.
- Allow airports and FBOs to continue safe operations using the high-level control devices already installed and required on all mobile refuelers, which when operated properly have a demonstrated history of reliability.

We strongly recommend acceptance of the proposed TIA 1539. Please do not hesitate to contact us if we can help in understanding these potential impacts to airport operations.

Sincerely,

D. E. Ruppel
President
Foran, Rosanne

From: Cabrera, José J. (SFS-BCT)
Sent: Wednesday, November 11, 2020 8:51 AM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern,

I fully support proposed TIA 1539.

Stay well,

José J. Cabrera
General Manager BCT

Signature Flight Support
3300 Airport Road
Boca Raton, FL 33431

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.

Please consider the environment before printing this email.
Foran, Rosanne

From: Fowler, Aaron (SFS-MEM)
Sent: Wednesday, November 11, 2020 10:08 AM
To: Shared TIAs
Subject: Support of Proposed TIA 1539

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I fully support proposed TIA 1539.

Aaron Fowler
Station Manager
Signature Flight Support
Memphis, TN

This message may contain confidential and/or privileged information. If you are not the intended recipient or believe you have received this message in error, please notify us immediately by responding to the sender and then delete this message from your system.
My name is Ron Slonaker and I am writing to you on behalf of Pocono Mountain Municipal Airport in support of proposed TIA 1539. To require all existing load racks and mobile refuelers to be retrofitted with automatic shut off systems creates an unreasonable financial burden while doing little to reduce actual risk. The overfilling of mobile refuelers is not something that occurs with such frequency as to prompt the excessive and costly regulatory enforcement that the current language in section 5.1.12.4 mandates. All at a time when our industry is already hurting from the impacts of this global pandemic. Safety standards and mechanical safeguards are already in place which prevent the overflow of mobile refuelers and we strongly encourage the NFPA to approve TIA 1539.

Ron Slonaker
Airport Manager
Pocono Mountains Municipal Airport
Authority
As current president of the Board of Directors of the Oregon Airport Management Association (OAMA) representing nearly 100 airports in the state of Oregon, I wish to add our comments to the docket fully in support of the NATA proposal (attached) to modify the language of NFPA-407-2017 and proposed 2022 editions of the NFPA Standard for Aircraft Refuel Servicing.

These proposed changes were submitted by Steve Berry of the National Air Transportation Association and are contained in TIA Log No. 1539, Reference 5.1.12.4

The addition of fuel-system cutoff devices proposed in the NFPA language is both overly costly and logistically unachievable for many if not most small airports in Oregon, and would impose a greater burden than should reasonably be demanded.

Sincerely,

Larry Graves
Director
Josephine County Airports
1441 Brookside Blvd, Grants Pass, OR 97526
(541) 955-4535 Ofc (541) 660-2169 C | josephinecounty.gov

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This email is a public record of Josephine County and is subject to public disclosure unless exempt from disclosure under Oregon Public Records Law. This email is subject to retention.
To Whom It May Concern

I understand my submission is 4 days late but I’ve been out of the office for personal emergency and I thought this message had already been sent.

Please accept my submission (attachment), in reference to, NFPA 407, as the Manager of the French Lick Municipal Airport.

Thank you.

Matthew Carson  
Airport Manager  
French Lick Municipal Airport  
ph: (812) 936-2222  
fx: (812) 936-3134  
manager@frenchlickairport.com
The NFPA & The 407 Technical Committee:

The French Lick Municipal Airport (KFRH) located in French Lick, Indiana is a small FBO that was established in 1964. We have read that there is a proposed change to NFPA 407 requiring general aviation airports and FBO’s to retrofit their fuel farms and mobile refuelers with automatic shut down system. This will cost us and other FBO’s that are already financially burdened several thousands of dollars. With the COVID-19 Pandemic, undue stress is already placed on small businesses and extra expenses could cause companies to cease to exist.

NATA has proposed a Tentative Interim Amendment (TIA) removing the retroactive nature of the current language in NFPA 407, applying it to only new fuel farm/fuel truck installations. When an FBO is preparing to build a new aviation fuel farm or add an additional fuel truck, this new equipment can be planned and resourced within the operation budget. When the fuel farm was built, in 1994, no such regulation was required. We complied with all regulations governing installation at that time. The French Lick Municipal Airport has safety measures in place that have never failed since their implementation. As with safety, training is very important to make sure employees operating the systems do not override the safety protocols already in place. We strive to make sure our employees do not become complacent. We see no value in the proposed retrofit as the safety procedures currently in place work. Asking our company and other FBO’s to add thousands of dollars to our operating expenses is not the right thing to do currently.

The French Lick Municipal Airport is in support of TIA 1539 and strongly encourage the Technical Committee to approve the TIA. Our company specializes in customer services providing aviation fuels (Jet-A & AVGAS), courtesy and rental vehicles, ground services as well as concierge services.

In conclusion, the French Lick Municipal Airport is in support of TIA 1539 and encourage you to support this Amendment.

Thank you.

Respectfully,

Matthew C. Carson, Manager
French Lick Municipal Airport
November 23rd, 2020

National Fire Protection Association
Standards Council
1 Batterymarch Park
Quincy, MA 02169-7471

Dear NFPA Standards Council,

As per the requirements of section 1.6.3 of the *NFPA Standards Directory 2020* (page 10), the following is being submitted as an official notice of appeal regarding TIA 1539:

1) **Appellant**
   Steve Berry- Staff Liaison- NATA GA Fuel Handling Subcommittee
   National Air Transportation Association (NATA)
   818 Connecticut Avenue, NW, Suite 900
   Washington, DC 20006

2) **Statement identifying the particular action to which the appeal relates**
   This appeal is in regard to TIA 1539 which was not approved through the standard balloting process defined in section 5.6 of the *NFPA Standards Directory 2020* (page 28).

3) **Arguments setting forth the grounds for the appeal**
   3.1. TIA 1539 generated tremendous public support with 294 public comments submitted from stakeholders across nearly every segment of the general aviation industry. Of the 294 public comments submitted, **NONE** were in opposition to TIA 1539.

   3.2. As evidenced by many of the public comments submitted, mobile refuelers already have over-fill protection devices with a proven history of reliability. To our knowledge, there is no actual data showing that mobile refuelers are being over-filled at such a rate as to require the retrofitting of every fuel farm and mobile refueler in the country with compatible automatic-shut down systems.

   3.3. Without actual verifiable data to support their positions, it appears as if the dissenting members of the 407 Technical Committee, while well intentioned, are basing their positions on anecdotal evidence. Such an approach is in conflict with section 1.2.1 of the *NFPA 407-Standard for Aircraft Fuel Servicing* (page 4) and casts doubt on the NFPA standards creation process.
3.4. The majority of dissenting ballot comments speak to how this issue has been well debated amongst the 407 Technical Committee for years and that there was “plenty of time” for the public to submit input. In fact, the majority of the 407 Technical Committee members (16 of 30) support TIA 1539. As to why no public comments were submitted in the years prior to and following the 2017 revision of *NFPA 407- Standard for Aircraft Fuel Servicing*, we suspect it is due to the public comment solicitation process not being well publicized. Once the issue was brought to the attention of NATA and our GA Fuel Handling Subcommittee, we were able to raise industry awareness and garner tremendous support.

3.5. And lastly, to require retroactive compliance on existing fuel farms and mobile refuelers is unnecessary, costly, and onerous. Safety standards and safeguards are already in place to prevent the overfilling of mobile refuelers. Retrofitting existing equipment will not materially increase the level of safety, nor will the associated costs significantly reduce risk.

4) **Statement of the precise relief requested**
   We ask the NFPA Standards Council to issue/approve TIA 1539. Doing so will be in alignment with both the majority of the NFPA 407 Technical Committee members, and the hundreds of industry stakeholders who spoke out in support of TIA 1539.

5) **Whether a hearing on the appeal is being requested**
   Should the Standards Council reject this appeal a hearing is hereby requested.
NFPA 499-2021 Edition

Recommended Practice for the Classification of Combustible Dusts and of Hazardous
(Classified) Locations for Electrical Installations in Chemical Process Areas

TIA Log No.: 1534

Reference: 3.3.5 and A.3.3.5

Comment Closing Date: October 5, 2020

Submitter: Samuel Rodgers, Honeywell

www.nfpa.org/499

1. Revise 3.3.5 and associated Annex A.3.3.5 to read as follows:

3.3.5* Combustible Fibers/Flyings. Solid particles, including fibers, where one dimension
includes fibers is greater than 500 μm in nominal size, which can form an explosible mixture
with air at standard atmospheric pressure and temperature.

A.3.3.5 Combustible Fibers/Flyings. As used in this recommended practice, flyings
fiber/flying refers to a particle with a small cross-sectional area and a length greater than 500
μm. Flying is a general term encompassing any particle that can be suspended in air and that
has one or more dimensions greater than 500 μm. Examples of flyings include flat platelet-
shaped particulate, such as metal flake, and fibrous particulate, such as particle board core
material. To be covered by this recommended practice, the particle must present a flash-fire
hazard or explosion hazard when suspended in air. If the smallest dimension of a combustible
solid is greater than 500 μm, it is unlikely that the material would be combustible dust or
combustible flyings, as determined by test. Finely divided solids with lengths that are large
compared to their diameter or thickness usually do not pass through a 500 μm sieve, yet when
tested could still pose a deflagration hazard.

Combustible flyings that present a flash-fire hazard or explosion hazard when dispersed in air
must first be capable of being suspended in air under typical test conditions. The typical test
methods for evaluating a flash-fire or explosion hazard are ASTM E1226, Standard Test
Method for Explosibility of Dust Clouds, ISO 6184-1, Explosion protection systems – Part 1:
Determination of explosion indices of combustible dusts in air, or ISO/IEC 80079-20-2,
Explosive atmospheres – Part 20-2: Material characteristics – Combustible dusts test methods,
for procedures for determining the explosibility of dusts. A material that is found to not present
a flash fire or explosion hazard could still be an ignitible fiber/flying, as defined in 3.3.7.

Substantiation: The current text for the definition and annex of “combustible fibers/flyings”
contains incomplete sentences and can result in incorrect understanding of this important new
material form. A ballot comment was made by the author, with the assumption that these
editorial corrections could be made in the normal course of review. However, this was not done.
A number of NFPA standards, including NFPA 70, are currently processing TIA's to extract this
definition and annex into their documents in order to retain the appropriate linkage to the
relevant document.

Emergency Nature: The standard contains an error or an omission that was overlooked during
the regular revision process.

A number of NFPA standards, including NFPA 70, are currently processing TIA's to extract this
definition and annex into their documents in order to retain the appropriate linkage to the
relevant document. The TIA's include the text as intended by the committee, which has now
been found to differ from the published text.
MEMORANDUM

TO: Technical Committee on Electrical Equipment in Chemical Atmospheres

FROM: Diane Matthews, Committee Administrator

DATE: October 6, 2020

SUBJECT: NFPA 499 Proposed TIA No. 1534 Final Ballot Results

No public comments were received on this TIA, therefore, according to 5.6(a) in the NFPA Regs, the final results show this TIA HAS NOT achieved the ¾ majority vote needed on both Ballot Item No. 1 (Technical Merit) and Ballot Item No. 2 (Emergency Nature).

23  Eligible to Vote
  5  Not Returned (Brown, DeFelice, Jr., Malanga, Morrison and Saverino)

<table>
<thead>
<tr>
<th>Technical Merit</th>
<th>Emergency Nature</th>
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<tbody>
<tr>
<td>0  Abstentions</td>
<td>0  Abstentions</td>
</tr>
<tr>
<td>13 Agree (w/comment, Egloff, Fiske, Myers and Zewe)</td>
<td>13 Agree (w/comment, Egloff, Fiske, and Hamilton)</td>
</tr>
<tr>
<td>5  Disagree (Ankele, Brownlee, Kines, Kohuch and Wechsler)</td>
<td>5  Disagree (Ankele, Brownlee, Kines, Kohuch, and Wechsler)</td>
</tr>
</tbody>
</table>

There are two criteria necessary to pass ballot [(1) simple majority (2) affirmative ¾ vote]. Both questions must pass ballot in order to recommend that the Standards Council issue this TIA.

(1) In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required.
   23 eligible ÷ 2 = 11.50 = 12 (rounded up)

(2) The number of affirmative votes needed to satisfy the ¾ requirement: 14
   (23 eligible to vote - 5 not returned - 0 abstentions = 18 × 0.75 = 13.50)

Ballot comments are attached for your review.

The Regs at 1.6.2.(c) state: An appeal relating to a proposed Tentative Interim Amendment that has been submitted for processing pursuant to Section 5.2 shall be filed no later than 5 days after the notice of the TIA final ballot results are published in accordance with 4.2.6.

**Appeal Closing Date** for this TIA is **October 11, 2020**.
NFPA 499 Proposed TIA Log No. 1534 Final Ballot Results

QUESTION NO. 1: I AGREE with the TECHNICAL MERITS of the PROPOSED TIA LOG No. 1534 to the 2021 Edition of NFPA 499 to Revise 3.3.5 and associated Annex A. 3.3.5.

Eligible to Vote: 23
Not Returned : 5
Ronald M. Brown,Joseph V.
Saverino,Robert Malanga,Frank C.
DeFelice, Jr.,Adam Morrison

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<tr>
<th>Vote Selection</th>
<th>Votes</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Agree</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>William G. Lawrence, Jr.</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>William T. Fiske</td>
<td>This is needed to resolve some of the conflicts among NFPA 499, NFPA 70, NFPA 652 and NFPA 654.</td>
<td></td>
</tr>
<tr>
<td>Samuel A. Rodgers</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Chris Cirelli</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Joseph Anthony Aleksa</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Matt Egloff</td>
<td>The change is clarifying.</td>
<td></td>
</tr>
<tr>
<td>Timothy J. Myers</td>
<td>Agree - But note in Section 3.3.5 is should say &quot;one or more dimensions&quot; rather than &quot;one dimension&quot; to be consistent with section A.3.3.5 and to also include flakes.</td>
<td></td>
</tr>
<tr>
<td>Jack Zewe</td>
<td>A. The standard contains an error or an omission that was overlooked during the regular revision process.</td>
<td></td>
</tr>
<tr>
<td>James G. Stallcup</td>
<td>I AGREE with the TECHNICAL MERITS of the PROPOSED TIA LOG No. 1534 to the 2021 Edition of NFPA 499 to Revise 3.3.5 and associated Annex A. 3.3.5.</td>
<td></td>
</tr>
<tr>
<td>Bridget Hamilton</td>
<td>I agree with the technical merits of the proposed change.</td>
<td></td>
</tr>
<tr>
<td>Alphonse Aliperti</td>
<td>Agree</td>
<td></td>
</tr>
</tbody>
</table>
As written, the TIA is incomplete. There are technical errors in NFPA 499:2021 that will cause confusion and could result in possible disagreement with the "dust TIA’s" for the NEC and other standards. 1. The definition of Group IIIA in the new NFPA 499 is incorrect. We introduced the new term Combustible Fibers/Flyings based upon the ISO/IEC/UL 80079-20-2 test determination for Group IIIA combustible flyings. In doing the research for this change to 499, I realized that when CMP-14 wrote Article 506 we mistakenly equated Group IIIA combustible flyings (which can remain in suspension in the air and can form combustible mixtures) to Class III ignitable fibers/flyings (which are large, heavy and are considered a fire hazard in a layer). The EECA failed to remove that statement from 3.3.4.4 during the last cycle. I would propose that the TIA should additionally correct the definition of Group IIIA by using the definition as follows: 3.3.4.4 Group IIIA. Combustible fibers/flyings, other than combustible metal. A.3.3.4.4 Group IIIA. Group IIIA materials are larger particle-size Group IIIB materials and do not include metal dust or metal fibers/flyings. 2. For the definition of Combustible fibers/Flyings, the use of the term particle is confusing when making reference to combustible fibers/flyings and should instead refer to materials which can form explosive mixtures. 3.3.5* Combustible Fibers/Flyings. Solid materials, where one dimension is greater than 500 μm in nominal size, and which can form an explosive mixture with air at standard atmospheric pressure and temperature. 3. A.3.3.5 needs to be revised to be revised to read as follows because the use of the term particle is confusing when making reference to combustible fibers/flyings and should instead refer to materials which can form explosive mixtures. A.3.3.5 Combustible Fibers/Flyings. To be covered by this recommended practice, the fibers/flyings present an unconfined explosion condition (also called a flash-fire) or an explosive hazard when suspended in air. The typical test methods for evaluating an unconfined explosion condition or an explosive hazard are ASTM E1226, Standard Test Method for Explosibility of Dust Clouds, or ISO 6184-1, Explosion protection systems — Part 1: Determination of explosion indices of combustible dusts in air, or ISO/IEC/UL 80079-20-2, Explosive atmospheres — Part 20-2: Material characteristics — Combustible dusts test methods, for procedures for determining the explosibility of dusts. A material that is found to not present an explosion or explosive hazard but also not be suspended in air could be an ignitable fiber/flying as defined in 3.3.7. Examples of flyings include flat platelet-shaped metal flake, particle board material and fibrous particle board core material.
I have re-read the NFPA 499 cycle document and considered how this would be applied within other codes like NFPA 70 Chapter 5 and NFPA 654. Issuing a TIA should result in a correction and/improvement to the document. As proposed changing 3.3.5 and A.3.3.5 with a word swap does not rise to this level and as such I am not supporting this TIA. I would support a TIA to address the following: Revise 3.3.4.4 with the following replacement text as follows: Combustible fibers/flyings other than combustible metals Revise 3.3.4.5 as follows: End sentence after ..atmosphere under their own weight. {Delete is equivalent to....} Revise 3.3.4.6 as follows: End sentence after ....including combustible metal fibers/flyings. {Delete Group IIIC is....} Revise 3.3.5 as follows: 3.3.5* Combustible Fibers/Flyings. Solid materials where any dimension is greater than 500 μm in nominal size, which can form an explosive mixture when suspended in air at standard atmospheric pressure and temperature. Revise Annex A3.3.5 as follows: To be covered by this recommended practice, the fibers/flyings present an unconfined explosion condition (also called a flash-fire) or an explosive hazard when suspended in air. The typical test methods for evaluating an unconfined explosion condition or an explosive hazard are ASTM E1226, Standard Test Method for Explosibility of Dust Clouds, or ISO 6184-1, Explosion protection systems — Part 1: Determination of explosion indices of combustible dusts in air, or ISO/IEC/UL 80079-20-2, Explosive atmospheres — Part 20-2: Material characteristics — Combustible dusts test methods, for procedures for determining the explosibility of dusts. A material that is found to not present an explosion or explosive hazard but also not be suspended in air could be an ignitable fiber/flying as defined in 3.3.7. Examples of flyings include flat platelet-shaped metal flake, particle board material and fibrous particle board core material.
QUESTION NO. 2: I AGREE that the subject is of an EMERGENCY NATURE for one or more of the reasons noted in the Instructions box.

Eligible to Vote: 23  
Not Returned: 5  
Ronald M. Brown, Joseph V. Saverino, Robert Malanga, Frank C. DeFelice, Jr., Adam Morrison

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<tr>
<td>William G. Lawrence, Jr.</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>William T. Fiske</td>
<td></td>
<td>With NEC in cycle, time is of the essence.</td>
</tr>
<tr>
<td>Samuel A. Rodgers</td>
<td></td>
<td>The standard contains an error or an omission that was overlooked during the regular revision process.</td>
</tr>
<tr>
<td>Chris Cirelli</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Joseph Anthony Aleksa</td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>Matt Egloff</td>
<td></td>
<td>It should be changed and if this is the mechanism I concur.</td>
</tr>
<tr>
<td>Timothy J. Myers</td>
<td></td>
<td>A and B</td>
</tr>
<tr>
<td>Jack Zewe</td>
<td></td>
<td>A. The standard contains an error or an omission that was overlooked during the regular revision process.</td>
</tr>
<tr>
<td>James G. Stallcup</td>
<td></td>
<td>I AGREE that the subject is of an EMERGENCY NATURE for one or more of the reasons noted in the Instructions box.</td>
</tr>
<tr>
<td>Bridget Hamilton</td>
<td></td>
<td>I agree to correct the conflict with the other NFPA standards.</td>
</tr>
<tr>
<td>Alphonse Aliperti</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Babanna Biradar</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Erdem A. Ural</td>
<td></td>
<td>The standard contains an error or an omission that was overlooked during the regular revision process.</td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donald W. Ankele</td>
<td></td>
<td>Because the proposed TIA is incomplete this should not proceed.</td>
</tr>
<tr>
<td>David B. Wechsler</td>
<td></td>
<td>The word order change does not rise to a level of this being a TIA nor would just this 3.3.5 change result in misunderstanding of this code. I plan on issuing another TIA for 499 containing changes reviewed by a working group and addresses important revisions which will improve the 499 document.</td>
</tr>
<tr>
<td>Robert Kohuch</td>
<td></td>
<td>changes to be considered during next document cycle</td>
</tr>
<tr>
<td>Ryan Brownlee</td>
<td></td>
<td>disagree in favor of new pending TIA</td>
</tr>
<tr>
<td>Haywood Kines</td>
<td></td>
<td>After Group Several discussions on this TIA it was obvious a second TIA was needed and be submitted to address the conflicts</td>
</tr>
<tr>
<td>Abstain</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
1. Revise definition for Fire Patterns to read as follows:

3.3.78 Fire Patterns. The visible or measurable physical changes, or identifiable shapes, formed by a fire effect or group of fire effects.

2. Revise the fifth and sixth steps in Figure 6.1.5 to read as follows:

Figure 6.1.5 Example of Applying the Scientific Method to Fire Pattern Interpretation.

Revise the fifth step in the figure to read:

Develop More than One Hypothesis

Explanation for and significance of

Fire patterns
Inductive reasoning

Revise just the title of sixth step in the figure to read:

Test the Hypothesis for Validity

Substantiation: Item 1. The requested changes to 3.3.78, the definition of “Fire Patterns”, is existing text (3.3.74, 2017 edition). Chapter 6 - Fire Effects and Fire Patterns went through a complete overhaul for the upcoming edition. The task group responsible for moving this body of work, intended for the definition of “Fire Patterns”, in Chapter 3, to be consistent with its description as provided at 6.3.18 of the new, approved text (Global FR-188). The changes identified above make the definition at 3.3.78 consistent with 6.3.18. (Credit: Joseph Sesniak).

Item 2. At the 2nd Draft meeting for the 2021 edition, a global revision (SR-54) was approved. The global nature of the revision was to catch identical textual changes in multiple figures (4.3.5, 4.3.6, 18.5, 19.5). Chapter 6 - Fire Effects and Fire Patterns, which went through a complete overhaul for the upcoming edition, had a new figure added to it (Fig. 6.1.5), that is of the same format as the four figures changed under SR-54. This was not caught or identified by the Committee, during the 2nd draft meeting; however, the affected text in Figure 6.1.5 also needs to be corrected to the identical changes approved under SR-54, for purposes of clarity and continuity.

Emergency Nature: The standard contains an error or an omission that was overlooked during the regular revision process. The NFPA Standard contains a conflict within the NFPA Standard or within another NFPA Standard.

Both items are presented for issuance of a TIA to address the potential for confusion or error in the analysis of fire effects and fire patterns by the reader, which could result in the development of an erroneous opinion that could have a negative affect on the outcome of a fire investigation. In addition, as this is newly organized chapter, with updated text, such errors may serve to reduce a readers confidence in the chapter or document as a whole.
MEMORANDUM

TO:        Technical Committee on Fire Investigations
FROM:      Elena Carroll, Sr. Committee Administrator
DATE:      October 2, 2020
SUBJECT:   NFPA 921 Proposed TIA No. 1528 FINAL TC BALLOT RESULTS

The public comment circulation has passed, therefore, according to 5.6(a) in the NFPA Regs, the final results show this TIA **HAS** achieved the ¾ majority vote needed on both Ballot Item No. 1 (*Technical Merit*) and Ballot Item No. 2 (*Emergency Nature*).

<table>
<thead>
<tr>
<th></th>
<th>Technical Merit:</th>
<th>Emergency Nature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible to Vote</td>
<td>35</td>
<td>0 Abstentions</td>
</tr>
<tr>
<td>Not Returned</td>
<td>(Engel, Sewchok)</td>
<td>32 Agree (w/comment, Baker, Campolo, Karasinski, Mansi, Rushton)</td>
</tr>
<tr>
<td>Agree (w/comment, Baker, Campolo, Karasinski, Mansi, Rushton)</td>
<td>33</td>
<td>32 Agree (w/comment, Baker, Mansi, Rushton)</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>1 Disagree (Campolo)</td>
</tr>
</tbody>
</table>

There are two criteria necessary to pass ballot [(1) simple majority (2) affirmative vote of ¾ of ballots received]. Both questions must pass ballot in order to recommend that the Standards Council issue this TIA.

(1) In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required.

\[
35 \text{ eligible} \div 2 = 17.5 = (18) \]

(2) The number of affirmative votes needed to satisfy the ¾ requirement is **25**.

\[
35 \text{ eligible to vote} - 2 \text{ not returned} - 0 \text{ abstentions} = 33 \times 0.75 = 24.75
\]

Ballot comments are attached for your review.

The Regs at 1.6.2.(c) state: An appeal relating to a proposed Tentative Interim Amendment that has been submitted for processing pursuant to Section 5.2 shall be filed no later than 5 days after the notice of the TIA final ballot results are published in accordance with 4.2.6.

**Appeal Closing Date** for this TIA is **October 7, 2020**.
### QUESTION NO. 1: I AGREE with the TECHNICAL MERITS of the Proposed TIA Log No. 1528 to Revise a definition and the fifth and sixth steps in Figure 6.1.5.

<table>
<thead>
<tr>
<th>Vote Selection</th>
<th>Votes</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGREE</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Thomas B. Sing</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Stephen P. Rinaldi</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Michael Beasley</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Steve Campolo</td>
<td>Changes add understanding</td>
<td></td>
</tr>
<tr>
<td>Mark S. Grotefeld</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Quentin A. Baker</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Thomas W. Horton, Jr.</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Stephen Kerber</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Kathryn C. Smith</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Vytenis (Vyto) Babrauskas</td>
<td>agree</td>
<td></td>
</tr>
<tr>
<td>Charles (Randy) Watson</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Joseph J. Sesniak</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Mike Rushton</td>
<td>The change seems to represent a more descriptive definition.</td>
<td></td>
</tr>
<tr>
<td>Karrie J. Clinkinbeard</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Andrew T. Cox</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Jason Karasinski</td>
<td>Recommend using the revised definition of Fire Patterns or changing both definitions to the new proposed wording.</td>
<td></td>
</tr>
<tr>
<td>Richard W. Jones, Jr.</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Richard A. Dyer</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Mark E. Sauls</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Mary Ann Maurath</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Philip C. Smith</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Daniel T. Gottuk</td>
<td>I agree with the Technical Merits of the Proposed TIA Log No. 1528 to Revise a definition and the fifth and sixth steps in Figure 6.1.5.</td>
<td></td>
</tr>
<tr>
<td>Peter Mansi</td>
<td>I have always pushed for practitioners use develop hypotheses and not a singular hypothesis. I am very happy this change has been put forward as I was going to do it myself on the next cycle, so a big yes from me. :)</td>
<td></td>
</tr>
<tr>
<td>Thomas Ost-Prisco</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Anthony D. Putorti, Jr.</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>Terry-Dawn Hewitt</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Brian Peterman</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Christopher B. Wood</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Edward S. Paulk</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>James H. Shanley, Jr.</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Michael Rindt</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Robin Jason</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Russell M. Whitney</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>DISAGREE</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>ABSTAIN</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### QUESTION NO. 2: I AGREE that the subject is of an EMERGENCY NATURE for one or more of the reasons noted in the Instructions box.

<table>
<thead>
<tr>
<th>Vote Selection</th>
<th>Votes</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGREE</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Thomas B. Sing</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Stephen P. Rinaldi</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Stephen Kerber</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Michael Beasley</td>
<td>A. The standard contains an error or an omission that was overlooked during the regular revision process.</td>
<td></td>
</tr>
<tr>
<td>Mark S. Grotefeld</td>
<td>A. The standard contains an error or an omission that was overlooked during the regular revision process. B. The NFPA Standard contains a conflict within the NFPA Standard or with another NFPA Standard.</td>
<td></td>
</tr>
<tr>
<td>Quentin A. Baker</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Thomas W. Horton, Jr.</td>
<td>A &amp; B</td>
<td></td>
</tr>
<tr>
<td>Kathryn C. Smith</td>
<td>A. The standard contains an error or an omission that was overlooked during the regular revision process</td>
<td></td>
</tr>
<tr>
<td>Vytenis (Vyto) Babrauskas</td>
<td>agree</td>
<td></td>
</tr>
<tr>
<td>Charles (Randy) Watson</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Joseph J. Sesniak</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Comment</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Mike Rushton</td>
<td>Appears to be a grammatical improvement.</td>
<td></td>
</tr>
<tr>
<td>Daniel T. Gottuk</td>
<td>I agree that the subject is of an Emergency Nature for one or more of the reasons noted in the Instructions box.</td>
<td></td>
</tr>
<tr>
<td>Karrie J. Clinkinbeard</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Robin Jason</td>
<td>The standard contains an error or an omission that was overlooked during the regular revision process.</td>
<td></td>
</tr>
<tr>
<td>Andrew T. Cox</td>
<td>A.</td>
<td></td>
</tr>
<tr>
<td>Jason Karasinski</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Richard W. Jones, Jr.</td>
<td>A. The standard contains an error or an omission that was overlooked during the regular revision process.</td>
<td></td>
</tr>
<tr>
<td>Richard A. Dyer</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Mark E. Sauls</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Mary Ann Maurath</td>
<td>A and B</td>
<td></td>
</tr>
<tr>
<td>Philip C. Smith</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Peter Mansi</td>
<td>It appears that any confusion will hopefully be avoided and the explanation given gets my support.</td>
<td></td>
</tr>
<tr>
<td>Thomas Ost-Prisco</td>
<td>The standard contains an error or an omission that was overlooked during the regular revision process.</td>
<td></td>
</tr>
<tr>
<td>Anthony D. Putorti, Jr.</td>
<td>Agree.</td>
<td></td>
</tr>
<tr>
<td>Terry-Dawn Hewitt</td>
<td>Agree B</td>
<td></td>
</tr>
<tr>
<td>Brian Peterman</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Christopher B. Wood</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Edward S. Paulk</td>
<td>Agree A and B</td>
<td></td>
</tr>
<tr>
<td>James H. Shanley, Jr.</td>
<td>Agree</td>
<td></td>
</tr>
<tr>
<td>Michael Rindt</td>
<td>A &amp; B</td>
<td></td>
</tr>
<tr>
<td>Russell M. Whitney</td>
<td>A. The standard contains an error or an omission that was overlooked during the regular revision process.</td>
<td></td>
</tr>
<tr>
<td>DISAGREE</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Steve Campolo</td>
<td>NEMA does not agree that the changes suggested in the TIA are of an Emergency Nature. They do not correct an error but rather add clarity and uniformity.</td>
<td></td>
</tr>
<tr>
<td>ABSTAIN</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
I speak in favor of this proposed TIA.

The submitter credited the undersigned as the source of information regarding the intent of the Chapter 6, Fire Effects and Fire Patterns task group, regarding the definition of Fire Pattern in section 3.3.78.

As a member of the task subject group, I personally worked on this definition. I submit this comment publicly stating the intent of the task group is as described by the submitter as relates to proposed TIA log 1528.

Joe Sesniak
IAAI-CFI, IAAI-CI, CFEI, GIFireE
From: George Malone  
Sent: Wednesday, August 12, 2020 11:24 AM  
To: TIAs  
Subject: Comment on Proposed TIA 1528 on NFPA 921

To Whom It May Concern,

I would like to make a comment to Item 1. The substantiation for this item is to be consistent. Therefore, I proposed the following text for “3.3.78 Fire Patters: An Identifiable shape or progression of fire effects.”

We need to make 3.3.78 match 6.3.18. The text displayed in the TIA does not accomplish this. In 3.3.78, it talks about “physical changes” and “group of fire effects.” None of this language is in 6.3.18.

In 6.3.18, it talks about “progression” of fire effects. There is nothing about “progression” in 3.3.78. One spot needs to be made to match the other. I do not care which one is made to match the other. I prefer the definition in 6.3.18. Maybe the definition needs to be rewritten and it needs to be changed in both locations.

Just my comments.

Thanks,
George Malone

George B. Malone, IAAI-CFI, CI, ECT  
Operations Manager Fire Training  
Collin College Fire Academy  
3600 Redbud Blvd.  
McKinney, TX 75069  

www.collin.edu/firescience
INTEROFFICE MEMORANDUM

TO: Ms. Dawn-Michele Bellis, Director, Standards Administration

FROM: Lawrence B. Russell, Pr. Specialist, Staff Liaison for NFPA 350

DATE: 03 August 2020

SUBJECT: NFPA 350 (CNS-AAA) Change Revision Cycle Period from 3-Years to 5-Years

The NFPA Technical Committee on Confined Space Safe Work Practices (CNS-AAA) met on 23 June 2020 to develop revisions for the First Draft of NFPA 350, Guide for Safe Confined Space Entry and Work. During that meeting the Committee members unanimously approved a motion to move NFPA 350 from a 3-year revision cycle to a 5-year revision cycle, effective after the publication of the (next) 2022 edition of the Guide.

The attached letter from CNS-AAA Chairman, Leslie Don English (Attachment 1) provides the substantiation for the Committee’s decision to present this request to the Standards Council. Briefly, it is the opinion of the twenty-three principal Committee members; three voting Alternates; and the seven alternate (non-voting) members who participated in the meeting on 23 June 2020 that NFPA 350 has moved from the document development phase, to a document maintenance phase. Therefore, the need to meet on a three-year schedule to revise this document is no longer necessary. A list of the Committee members that participated in the meeting on 23 June is attached to this memorandum (Attachment 2).

It is my opinion that there are no foreseeable or anticipated issues moving the revision cycle to a 5-year period. NFPA 350 does not supersede or replace any requirements in existing or future codes, standards, and regulations applicable to confined space activities. This Guide supplements existing confined space regulations, standards, and work practices by providing additional information for safe confined space entry and work. Future major revisions to this document will likely be the result of changes to regulations, or industry best practices or new technology. A five-year revision cycle will be sufficient to capture these changes if they occur.

I have contacted both the Marketing/Sales Team and Tiger Team an inquired if there will be any potential negative impact if NFPA 350 is moved from a 3-year revision cycle to a 5-year revision cycle. Both groups replied there will be no negative impact; and moving NFPA 350 to a 5-year cycle, it will not negatively impact NFPA LiNK™, formerly known as Content on Demand.
June 24, 2020

Ms. Dawn-Michele Bellis  
Director, Standards Administration  
National Fire Protection Association  
1 Batterymarch Park  
Quincy Ma, 02169

Dear Ms. Bellis:

I am writing on behalf of the Technical Committee on Confined Space Safe Work Practices (CNS-AAA) to request that the revision cycle for NFPA 350, Guide for Safe Confined Space Entry and Work, be moved from its current three-year revision cycle; to a revision cycle period of five years.

With the guidance of NFPA Staff Liaison, Ms. Nancy Pearce, the Technical Committee on Confined Space Safe Work Practices began its work on the development of this Guide in September 2012. A preliminary draft was presented to the NFPA Standards Council in August 2013; and the document was placed in the Fall 2015 revision cycle. The first publication of NFPA 350 was the 2016 edition. This was followed by the 2019 edition.

During these early revision cycles (F-2015 and F-2018) refinements were made to the original draft the Guide. In this current (F-2021) revision cycle, there was only a single public input for the Committee to consider that generated three First Revisions. Four other revisions were made to update references cited in the Guide. It is the opinion of the Committee that the document development phase for NFPA 350 has now moved into a document maintenance phase.

The First Draft web-meeting for the 2022 edition of NFPA 350 was conducted on June 23, 2020. Thirty-two of the forty-five Committee members (71% of the principals and alternates) participated in this meeting. The Committee discussed and agreed to present a request to the NFPA Standards Council to move NFPA 350 from a three-year revision cycle to a five-year revision cycle. There was no dissenting opinion at that meeting.

By direction of the Technical Committee on Confined Space Safe Work Practices (CNS-AAA), I request that the revision cycle for NFPA 350, Guide for Safe Confined Space
Entry and Work, be moved from its current three-year revision cycle; to a revision cycle period of five years. I request that the requested change to revision cycle period for NFPA 350 go into effect following the publication of the 2022 edition of the Guide.

Sincerely,

Leslie Don English,
Chairman
Technical Committee on Confined Space Safe Work Practices (CNS-AAA)
NFPA 350 (CNS-AAA) Change Revision Cycle Period from 3-Years to 5-Years

Attachment 2. CNS-AAA Members Who Participated in the First Draft Meeting for NFPA 350 on 23 June 2020 who agreed to move to a 5-year revision cycle after the 2022 edition of NFPA 350 is published.

PRINCIPALS & VOTING ALTERNATES

1. Leslie D. English
2. Adam C. Jones
3. Rick Argudin
4. Christopher S. Buehler
5. James R. Haizer, Jr.
6. Edward M. Hawthorne
7. Daniel Hudson
8. Alfred W. Keiss
9. Carlos Lasarte
11. Glenn E. Mate
12. Glenn E. Mcginley, II
13. David McLaughlin
14. Shawn Kevin Mohammed
15. Thomas Negrelli
16. David A. Noel
17. Martin Novich
18. Michael Palmer
19. Eric Zane Simmons
20. James L. Tyler
21. Robert H. Walker, III
22. Laura Hartline Weems
23. Leonard A. Young, Jr.
24. Cristine Z. Fargo (Voting Alternate)
25. Rodney Foster (Voting Alternate)
26. Kenny W. Oldfield (Voting Alternate)

ALTERNATES

1. Sherry Crush
2. Adam J. Goodman
3. Steven E. Kosch
4. Terry W. Krug
5. Michele Myers Mihelic
6. Vincent William Pempeit
7. Andrew Saunders
Maynard, Mary

Subject: FW: NFPA 1192/1194 Request to Slip Cycle
Attachments: Proposal to Change Revision Cycles (RJS edit).docx; NFPA 1192-1194 TC Poll Results.pdf

From: Wilmot, Jacqueline <JWilmot@nfpa.org>
Sent: Tuesday, July 28, 2020 11:32 AM
To: Maynard, Mary <mmaynard@NFPA.org>
Cc: Bellis, Dawn <DBellis@nfpa.org>; Vecchiarelli, Tracy <tvecchiarelli@nfpa.org>
Subject: NFPA 1192/1194 Request to Slip Cycle

NFPA 1192/1194 Technical Committee members are requesting this change to address the timing issues caused by the NFPA printing schedule and enhance the efficiency of standards enforcement throughout the recreation vehicle industry and reduce confusion with AHJs by aligning the revision cycle of that of NFPA 70, National Electrical code. Additional background information is provided in the attachment that I received from TC members.

In addition, I provided the doodle survey results when asking the TC members their opinion on changing revision cycles.

Regards,

Jacqueline R. Wilmot
Senior Engineer
NFPA
1 Batterymarch Park
Quincy, MA 02169-7471
jwilmot@nfpa.org
+1 617 984-7498

National Fire Protection Association
The leading information and knowledge resource on fire, electrical and related hazards.

IT’S A BIG WORLD. LET’S PROTECT IT TOGETHER.®

Important Notice: Any opinion expressed in this correspondence is the personal opinion of the author and does not necessarily represent the official position of the NFPA or its Technical Committees. In addition, this correspondence is neither intended, nor should it be relied upon, to provide professional consultation or services.

Confidentiality: This e-mail (including any attachments) may contain confidential, proprietary or privileged information, and unauthorized disclosure or use is prohibited. If you receive this e-mail in error, please notify the sender and delete this e-mail from your system.
Proposal to Realign NFPA 1192 Revision Cycles

By this submission, the RV Industry Association ("RVIA") is requesting that the revision cycle for the NFPA 1192 Standard for Recreational Vehicles and NFPA 1194 Standard for Recreational Vehicle Parks and Campgrounds (NFPA 1192/1194) be modified. This proposed modification will enhance the efficiency of standards enforcement throughout the recreation vehicle industry and reduce confusion with authorities having jurisdiction by aligning the revision cycle of NFPA 1192/1194 with that of NFPA 70 National Electrical Code ("NEC").

To accomplish this realignment, RVIA proposes that NFPA forgo the Revision Cycle: Annual 2023 for the 2024 edition of NFPA 1192/1194 and instead enter the next edition of NFPA 1192/1194 under the Revision Cycle: Annual 2025. Doing so will align the resulting 2026 edition of NFPA 1192/1194 with the 2026 edition of the NEC.

**Background:**

NFPA 1192, section 4.4, and NFPA 1194, section 2.2 references specific editions of the NEC and thereby incorporates its applicable provisions. Because of this reliance, it is critical that NFPA 1192/1194 not get significantly out of phase with the current edition of the NEC.

Editions of the NEC are typically updated to coincide with the NFPA Annual Meeting in the spring. Updates to NFPA 1192/1194 have, in past years, been processed during NFPA’s Fall Meeting. This approximately six-month time gap between approvals of the NEC and NFPA 1192 was successfully managed by the RV industry for many years. However, when NFPA eliminated its Fall Meeting, the revision cycle for NFPA 1192/1194 was moved into the next year’s Annual Meeting cycle. As a consequence, the approval gap between NFPA 1192/1194 and the NEC has now expanded to more than a year apart.

The 2018 NFPA 1192 cycle is the first time that the RV industry has experienced disarray in the established and accepted approach to a unified transition between editions, coordinated between all stakeholders, including the authorities having jurisdiction (state agencies with regulatory RV oversight). In previous cycles, this unified transition approach provided sufficient time for in-field training, ensured that an adequate supply of parts needed to comply with new requirements were available and provided the States with adequate time to update their RV regulations. Now however, the increased approval time gap between the two standards has created confusion in this system. For example, state electrical regulatory programs typically adopt a new edition of the NEC for state-wide use beginning in January of its edition date. But the current edition of NFPA 1192 continues to mandate by reference the previous NEC edition for an unacceptably long period of time before they finally realign more than a year later.

Timing issues caused by NFPA’s printing schedule also contribute to the problem. For instance, the 2021 edition of NFPA 1192 is not scheduled to be printed until October 2020. Until this 2021 edition is printed and available so the states can amend their regulations, the 2020 NEC will not become effective and the RV industry will continue to use the 2017 edition of the NEC. As a result, the latest NEC does not become effective until months after the new, printed edition
of NFPA 1192, becomes available. A particularly frustrating consequence of this timing issue is that, under the existing schedule, public inputs (“PIs”) for the next NEC edition are required to be submitted before the current NEC edition even comes into use, under NFPA 1192. Specifically, PIs for the 2023 NEC must be submitted by September 10, 2020, but the NFPA 1192 is not scheduled to be printed until October 16, 2020. This entire situation should be corrected.

Proposal:

Therefore, for all of the reasons stated above, RVIA proposes modifying the next NFPA 1192/1194 revision cycle from a 2024 edition to a 2026 edition. This change will still fall within ANSI’s maximum five-year mandate between editions (2021-2026).

Adopting this proposed alignment will allow the NFPA 1192/1194 and NEC to be revised on closer, parallel schedules; and ultimately will enable both editions to be adopted and positioned for implementation at the beginning of 2026, in their mutually designated edition years.
<table>
<thead>
<tr>
<th>Name</th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
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<td>Kerry Parrott</td>
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</tbody>
</table>

Count | 1 | 13 |
Date: July 28, 2020

TO: NFPA Standards Council

FROM: International Fire Marshal Association (IFMA) Executive Board

Subject: Future Valet Trash Concerns to NFPA 1

During the 2020 Technical Session voting, 3 separate CAM’s were presented regarding Valet Trash. NFPA 1 CAM 1-8 failed while NFPA 101 1-10/101-20 and 101-11/101-21 both passed removing valet trash from 101. The IFMA Executive Board would propose a request to the Standards Council that the NFPA 1, Fire Code would be the exclusive standard where this issue would be addressed in the future and not in NFPA 101, Life Safety Code.

We would humbly make this request for the following reasons:

1) We believe the Valet Trash issue is more than a life safety issue, which is supported by the scope of NFPA 1, specifically in several sections:
   - 1.1.1(1) the storage of additional fuel packages in the means of egress is a fire related life safety situation.
   - 1.1.1(8) the addition of trash storage in hallways will impede fire department operations.
   - 1.1.1(11) the additional combustible materials associated with storage of trash will contribute to fire spread and smoke production.
   - 1.1.1(15) the added fuel will create added hazards to firefighter safety due to fire, smoke, and heat production.
   - 1.1.1(16) trash in the hallway will affect the means of egress.

2) We believe NFPA 1 includes proven fire safety principles used for many years which protect life and property but also provides the appropriate process to consider any future concerns pertaining to Valet Trash.

We appreciate your consideration of this request and appreciate your leadership as a part of the NFPA Codes and Standards process.

Respectfully,

Christopher Hiener, President
International Fire Marshals Association
I am asking the Standards Council to rule on which document has jurisdiction on valet trash requirements. During the 2021 development of NFPA 1 and 101 valet trash provisions were acted on by both documents, these provisions were not the same. The 2020 Technical Session on these documents had actions on valet trash that could have differing requirements on the same topic in multiple documents. Luckily the action by the membership did not include valet trash provisions in either document. Based on conversations, valet trash will return for the 2024 cycle of NFPA 1 and 101. Before the cycles start it would benefit the Technical Committees and those interested in valet trash to know where to place their time and energy for the next cycle. It is my belief that NFPA 1 should be responsible for any provisions related to valet trash as it is a life safety, property protection and fire fighter safety issues and falls under the scope of NFPA 1. Thank you for your consideration in this matter.

Steven Sawyer
TO: Standards Council

CC: Dawn Michele Bellis, Standards Council Secretary

FROM: Stephen Ganoe, on behalf of the NFPA Technical Committee on Fire Risk Assessment Methods

DATE: October 21, 2020

SUBJECT: Committee Scope Revision Request: FIR-AAA Committee (NFPA 550/551)

Please consider the request of the NFPA Fire Risk Assessment Methods Technical Committee to change the committee name. The current committee name is “Technical Committee on Fire Risk Assessment Methods”. The requested change is to remove word “Fire” and make the committee name “Technical Committee on Risk Assessment Methods”.

The committee believes that the existing scope of the technical committee already goes beyond fire risk assessment and removing the word “fire” from the title makes that clearer to other committees.

This change was first proposed in the First Draft meeting of NFPA 551 on May 2, 2014. At that time, it was decided for Chairman Meacham to draft language to modify the committee scope to address general “risk” related issues and not just “fire risk” events. In the First Draft meeting of NFPA 550 on May 21, 2015, the committee discussed the potential change and asked to review the updated scope and provide any feedback to the SL and Chair. During the First Draft meeting of NFPA 551 on April 12, 2017, the committee decided to change the committee scope as opposed to the document scope and the discussion was postponed until more members could participate in the discussion. At the next First Draft Meeting of NFPA 550 and NFPA 551 on April 17, 2020, the committee agreed upon the current committee scope and recommended to amend the committee title. As a result, the technical committee requested that staff submit a request to change the title of the committee to the Standards Council for consideration.
To: NFPA Standards Council  
From: Jeff Sargent, Staff Liaison, National Electrical Code  
Topic: Revisions to NEC Style Manual  
Date: 10/23/2020  

At the March 3 & 4, 2020 meeting of the National Electrical Code Correlating Committee the CC’s Usability Task Group (UTG) was asked to make the necessary revisions to the Style Manual to address how definitions are located and applied in the NEC. Additionally, the UTG was asked to review the use and location of informational notes in the NEC. The UTG, chaired by CC member David Williams met numerous times throughout the spring and in addition to the work initially discussed at the CC meeting made other clarifications in the document to better convey its requirements. The revised document has been reviewed by the NEC Correlating Committee and they recommend its endorsement by the Standards Council. With that endorsement, the 2020 edition of the NEC Style Manual will be used for the 2023 NEC revision process and the next revision of NFPA 70E.

The revised NEC Style Manual has also been vetted by NFPA Standards Administration staff, NFPA production staff and NFPA editorial staff. Comments from those reviewers have been implemented into the final revised version.

Major changes to the NEC Style Manual include:

- All definitions will reside in Article 100. Previously, definitions were in Article 100 and in other articles throughout the NEC. Additionally, requirements on the structure of definition titles were added to support the relocation of the definitions to Article 100. This revision brings the NEC into alignment with how definitions are in other NFPA documents.
- Chapter 5 of the NEC Style Manual has been deleted. Chapter 5 of the NEC contained administrative requirements that were covered in the Regulations Governing the Development of NFPA Standards or were not appropriate for a document style manual.
- A requirement in Chapter 4 relative to interpretation of extract material was deleted because the topic is clearly addressed in the Extract Policy.
- For uniformity throughout the document, requirements on the titles and arrangement of parts within articles were added.
- For uniformity throughout the document, a requirement on how referenced standards are presented in informational notes was added.
FOREWORD

August 2015

The National Electrical Code® is used nationally and internationally as the basis for safeguarding persons, buildings, and their contents from hazards arising from the use of electricity. It is vitally important that the text be as explicit as possible and that maximum consistency be achieved in the language used in the text. The Code contains those provisions considered necessary for safety and thus is widely used as a basis for legal enforcement in the installation of electrical conductors and equipment in buildings and certain other premises (as detailed in the Code itself); this places a major responsibility on those involved in the preparation of document text to use forms of expression that promote uniform interpretation.

The National Electrical Code Correlating Committee has recognized these responsibilities and has issued this manual.

Preparation and Date of Adoption. This manual was originally prepared by the Editorial Task Group of the National Electrical Code Committee and adopted by the National Electrical Code Correlating Committee on May 13, 1969. It was amended September 22, 1975, October 11, 1984, October 12, 1989, and May 9, 1994.

In January 1999, the Correlating Committee Task Group on the Usability of the NEC rewrote the manual. It was adopted by the National Electrical Code Correlating Committee on March 19, 1999 and by the Standards Council on April 15, 1999. It was amended March 1, 2001, January 15, 2003, and August 9, 2011, August 2015, and August 2020.
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CHAPTER 1 GENERAL

1.1 Purpose. The National Electrical Code (NEC) Style Manual is prepared under the guidance of the NEC Correlating Committee and is used to advise members of the National Electrical Code Committee and the Technical Committee on Electrical Safety in the Workplace on the required editorial style and arrangement of their respective documents. It is intended to be used as a practical working tool to assist in making the documents as clear, usable, and unambiguous as possible.

1.2 Scope. This manual provides editorial and administrative requirements for writing NFPA 70®, National Electrical Code, and NFPA 70E®, Standard for Electrical Safety in the Workplace®. Except as otherwise specified in this manual, the National Electrical Code and the Standard for Electrical Safety in the Workplace shall comply with the Manual of Style for NFPA Technical Committee Documents. For the purposes of this manual, use of the term document or documents includes NFPA 70, National Electrical Code, and NFPA 70E, Standard for Electrical Safety in the Workplace, unless specifically stated otherwise. Additionally, unless specifically stated otherwise, use of the term technical committee (TC) includes the NEC code-making panels and the NFPA 70E technical committee.

1.2.1 Requirements Not Included. The NEC Style Manual does not include many purely editorial and stylistic matters, including, but not limited to, the formatting of tables, and capitalization practices. For information on these editorial guidelines, see the Manual of Style for NFPA Technical Committee Documents.

1.2.2 Format. These documents are formatted differently from other NFPA standards. Examples of these differences include, but are not limited to, arrangement of the document, its internal numbering system, and use of informational notes. The National Electrical Code Correlating Committee staff liaison shall be responsible for recommending to the correlating committee resolutions of any apparent conflicts or discrepancies between the Manual of Style for NFPA Technical Committee Documents and this manual.

1.3 Regulatory Adoption. Because these documents are intended to be suitable for adoption as regulatory documents, it is important that they contain clearly stated mandatory requirements in the document text. This should encourage uniform adoption without alterations.

1.4 Examples. The examples shown throughout this manual are intended to be representative of the style and arrangement of the text. The actual text used in the example may or may not match the current document text.
2.1 **Subdivisions of the Documents.** Documents shall be organized as follows.

2.1.1 **Introduction.** Article 90 contains the scope, purpose, and administrative provisions.

2.1.2 **Chapters.** Chapters are major subdivisions of the document that cover broad areas and are divided into articles.

2.1.2.1 **National Electrical Code (NFPA 70).** Chapters in NFPA 70, *National Electrical Code*, shall be organized as follows:

*Chapter 1 General*
- Article 100 — Definitions
- Article 110 — Requirements for Electrical Installations

*Chapter 2 Wiring and Protection Articles 200–299*

*Chapter 3 Wiring Methods and Materials Articles 300–399*

*Chapter 4 Equipment for General Use Articles 400–499*

*Chapter 5 Special Occupancies Articles 500–599*

*Chapter 6 Special Equipment Articles 600–699*

*Chapter 7 Special Conditions Articles 700–799*

*Chapter 8 Communications Systems Articles 800–899*

*Chapter 9 Tables*

2.1.2.2 **Standard on Electrical Safety in the Workplace (NFPA 70E).** Chapters in NFPA 70E, *Standard for Electrical Safety in the Workplace*, shall be organized as follows:

*Chapter 1 Safety-Related Work Practices*
- Article 100 — Definitions
- Articles 105–199

*Chapter 2 Safety-Related Maintenance Requirements Articles 200–299*

*Chapter 3 Safety Requirements for Special Equipment Articles 300–399*

2.1.3 **Articles.** Articles are chapter subdivisions that cover a specific subject such as grounding and bonding, overcurrent protection, luminaires, and so on. Each article shall have a title. Articles are divided into sections and sometimes into parts.
2.1.4 **Parts.** If an article is sufficiently large, or where necessary to logically group requirements, it shall be permitted to be subdivided into parts that correspond to logical groupings of information. Parts shall have titles and shall be designated by Roman numerals. *(See example.)* Parts typically consist of a number of sections; see 2.4.2.1 for section numbering in articles that are subdivided into parts. Where an article contains multiple parts and includes general installation requirements, such requirements shall be located in the first part titled “Part I. General”. Part titles shall be descriptive and as concise as possible.

Example:

Part I. General
Part II. Installation
Part III. Construction Specifications

2.1.5 **Subdividing Sections.** Sections shall be permitted to be subdivided for clarity, with each subdivision representing either a rule or a part of a rule. Up to three levels of subdivisions shall be permitted, and any level shall be permitted to contain a list.

Example:

Previous

230.66 Marking. Service equipment rated at 1000 volts or less shall be marked to identify it as being suitable for use as service equipment. All service equipment shall be listed or field labeled. Individual meter socket enclosures shall not be considered service equipment but shall be listed and rated for the voltage and ampacity of the service.

*Exception:* Meter sockets supplied by and under the exclusive control of an electric utility shall not be required to be listed.

Preferred

230.66 Marking.

(A) General. Service equipment rated at 1000 volts or less shall be marked to identify it as being suitable for use as service equipment. All service equipment shall be listed or field evaluated.

(B) Meter Sockets. Meter sockets shall not be considered service equipment but shall be listed and rated for the voltage and current rating of the service.

*Exception:* Meter sockets supplied by and under the exclusive control of an electric utility shall not be required to be listed

2.1.5.1 **List Formats.** Lists are a method of structuring the items necessary to complete a rule. Lists in any subdivision level or exception shall be numbered, and listed items shall be single words, phrases, or sentences. Items in a list shall not contain titles. Multilevel list items shall be arranged alternately in numerical and alphabetical order.
220.53 Appliance Load — Dwelling Unit(s). It shall be permissible to apply a demand factor of 75 percent to the nameplate rating load of four or more appliances fastened in place, other than electric ranges, clothes dryers, space-heating equipment, or air-conditioning equipment, that are served by the same feeder or service in a one-family, two-family, or multifamily dwelling.

Preferred

220.53 Appliance Load — Dwelling Unit(s).
It shall be permissible to apply a demand factor of 75 percent to the nameplate rating load of four or more appliances rated \( \frac{1}{4} \) hp or greater, or 500 watts or greater, that are fastened in place, and that are served by the same feeder or service in a one-family, two-family, or multifamily dwelling. This demand factor shall not apply to the following:

1. Household electric cooking equipment that is fastened in place
2. Clothes dryers
3. Space heating equipment
4. Air-conditioning equipment

2.1.5.2 Subdivision Titles. First and second level subdivisions shall have titles. Third level subdivisions shall be permitted to have titles.

2.1.5.3 References to Subdivisions. References to subdivisions within a requirement shall include the section number prior to the subdivision.

2.1.5.4 Subdivision Example. The following illustrates typical subdivision numbering with lists (see also 2.4):

Example:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Wiring and Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article</td>
<td>210 Branch Circuits</td>
</tr>
<tr>
<td>Part</td>
<td>Part I. General</td>
</tr>
<tr>
<td>Section</td>
<td>210.5 Identification for Branch Circuits.</td>
</tr>
<tr>
<td>First level subdivision</td>
<td>(A) Grounded Conductor. The grounded conductor of a branch circuit shall be identified in accordance with 200.6.</td>
</tr>
<tr>
<td>First level subdivision</td>
<td>(B) Equipment Grounding Conductor. The equipment grounding conductor shall be identified in accordance with 250.119.</td>
</tr>
<tr>
<td>First level subdivision</td>
<td>(C) Identification of Ungrounded Conductors. Ungrounded conductors shall be identified in accordance with 210.5(C)(1) or (C)(2), as applicable.</td>
</tr>
<tr>
<td>Second level subdivision</td>
<td>(1) Branch Circuits Supplied from More Than One Nominal Voltage System. Where the premises wiring system has branch circuits supplied from more than one nominal voltage system, each ungrounded conductor of a branch circuit shall be identified by phase or line and system at all termination, connection, and splice points in compliance with 210.5(C)(1)(a) and (C)(1)(b).</td>
</tr>
<tr>
<td>Third level subdivision</td>
<td>(a) Means of Identification. The means of identification shall be permitted to be by separate color coding, marking tape, tagging, or other approved means.</td>
</tr>
</tbody>
</table>
(b) Posting of Identification Means. The method utilized for conductors originating from branch-circuit panelboard or similar branch-circuit distribution equipment shall be documented in a manner that is readily available or shall be permanently posted at each branch-circuit panelboard or similar branch-circuit distribution equipment.

(2) Branch Circuits Supplied from Direct-Current Systems. Where a branch circuit is supplied from a dc system operating at more than 50 volts, each ungrounded conductor of 4 AWG or larger shall be identified by polarity at all termination, connection, and splice points by marking tape, tagging, or other approved means; each ungrounded conductor of 6 AWG or smaller shall be identified by polarity at all termination, connection, and splice points in compliance with 210.5(C)(2)(a) and (C)(2)(b). The identification methods utilized for conductors originating within each branch circuit panelboard or similar branch-circuit distribution equipment shall be documented in a manner that is readily available or shall be permanently posted at each branch circuit panelboard or similar branch-circuit distribution equipment.

(a) Positive Polarity, Sizes 6 AWG or Smaller. Where the positive polarity of a dc system does not serve as the connection point for the grounded conductor, each positive ungrounded conductor shall be identified by one of the following means:

List Item
(1) A continuous red outer finish

List Item
(2) A continuous red stripe durably marked along the conductor’s entire length on insulation of a color other than green, white, gray, or black

List Item
(3) Imprinted plus signs (+) or the word POSITIVE or POS durably marked on insulation of a color other than green, white, gray, or black, and repeated at intervals not exceeding 610 mm (24 in.) in accordance with 310.120(B)

(b) Negative Polarity, Sizes 6 AWG or Smaller. Where the negative polarity of a dc system does not serve as the connection point for the grounded conductor, each negative ungrounded conductor shall be identified by one of the following means:

List Item
(1) A continuous black outer finish

List Item
(2) A continuous black stripe durably marked along the conductor’s entire length on insulation of a color other than green, white, gray, or red

2.1.6 Informative Annexes. Annexes shall contain nonmandatory material, such as references, examples, calculations, and tables. Annexes do not form part of the requirements of the document, and a statement to that effect shall appear at the beginning of each annex. Annexes shall have titles and shall be designated by capital letters.

Example:

Informative Annex C
Conduit, Tubing, and Cable Tray Fill for Conductors and Fixture Wires of the Same Size

This informative annex is not a part of the requirements of this Code but is included for informational purposes only.

2.1.6.1 Cross-References Between Different Editions. Annexes that are used to cross-reference material from one edition of the document to another edition shall remain as an annex for a minimum of two document cycles. NFPA staff shall have the responsibility of updating any cross-reference annex.

2.2 Content of Document Subdivisions.

2.2.1 Scopes. Each article shall have a scope, which shall be the first section of the article. Where an article has multiple parts, the scope shall be the first section in Part I. The
approval of article scope statements is the responsibility of the National Electrical Code Correlating Committee.

Example:

**Article 230 Service**
**Part I. General**
230.1 Scope

2.2.2 **Definitions.** Definitions of terms used in the requirements of the document shall only be located in Article 100. Article 100 shall not be subdivided.

2.2.2.1 **Lists.** Numbered lists shall be permitted in definitions.

2.2.2.2 **Style.** Definitions shall be in alphabetical order and shall not contain the term that is being defined. Definitions shall not contain requirements or recommendations.

2.2.2.3 **Definition Title Structure.** Definitions that have subparts shall be listed alphabetically by the base term, with a comma and then the modifying descriptor.

Example:

**Circuit Breaker, Adjustable** (Adjustable Circuit Breaker)
**Circuit Breaker, Inverse Time** (Inverse Time Circuit Breaker)

2.2.2.3.1 **Defined Term.** To assist in electronic searching, the defined term shall then appear in parentheses as it would be found in the document.

Example:

**Service Conductors, Overhead.** (Overhead Service Conductors)
The overhead conductors between the service point and the first point of connection to the service-entrance conductors at the building or other structure. (CMP-10)

2.2.2.3.2 **Article Number.** For definitions that apply in only one article, the article number in parentheses shall follow the definition.

Example:

**Sign Body.** A portion of a sign that may provide protection from the weather but is not an electrical enclosure. (600) (CMP-18)

2.2.2.3.3 **Code-Making Panel Number.** For the National Electrical Code, the code-making panel responsible for the definition shall be identified in parentheses at the end of the definition following any extract or article information.

Example:

**Patient Bed Location.** The location of a patient sleeping bed, or the bed or procedure table of a Category 1 (critical care) space. [99:3.3.135] (517) (CMP-15)

2.2.2.4 **Terms with Multiple Definitions.** If two or more definitions exist for a term, a task group shall be formed to work on the development of a single acceptable definition. If this
cannot be accomplished, another term shall be selected or the term shall be specified in the context of the specific application.

Example:

**Accessible (as applied to equipment).**
Capable of being reached for operation, renewal, and inspection. (CMP-1)

**Accessible (as applied to wiring methods).**
Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building. (CMP-1)

### 2.2.2.5 Synonyms, Similar Terms, or Alternate Terms.
If the defined term has synonyms, similar terms, or alternate terms associated with the main term that all are to be understood as having the same definition, the base term being defined shall be followed by the alternate term in parentheses.

Example:

**Attachment Plug (Plug Cap) (Plug).** A device that, by insertion in a receptacle, establishes a connection between the conductors of the attached flexible cord and the conductors connected permanently to the receptacle. (CMP-18)

### 2.2.2.6 Definitions in Informative Annexes.
Definitions contained in annexes shall be used only in the context of that annex.

### 2.3 Tables and Figures.

#### 2.3.1 Mandatory.
Tables and figures, including any accompanying notes, represent mandatory requirements, unless specifically noted as in 2.3.2. Tables and figures shall be referenced in the text and shall be designated by the section number in which they are referenced. Each table shall have a title and each figure shall have a caption. Titles and captions shall be as brief as possible, consistent, and clear.

Example:

#### 220.42 General Lighting.
The demand factors specified in Table 220.42 shall apply to that portion of the total branch circuit load calculated for general illumination. They shall not be applied in determining the number of branch circuits for general illumination.

**Table 220.42 Lighting Load Demand Factors**

#### 2.3.2 Nonmandatory.
When the document is adopted into law, graphics in the text of the document become mandatory. If a technical committee wishes to use a table or figure to illustrate only a typical situation, not a mandatory requirement, that table or figure shall be identified as an informational note or be placed in an annex. Each table shall have a title and each figure shall have a caption.

### 2.4 Numbering Practices.
The following two practices are intended to improve document usability by preventing the continual renumbering of articles and sections from one edition to the next.
2.4.1 Parallel Numbering Within Similar Articles. To the extent possible, technical committees are encouraged to use the same section numbers (and part numbers, where applicable) for the same purposes within articles covering similar subjects.

Example:

A typical family of articles might be organized as follows:

**Article 330 Metal-Clad Cable: Type MC**

**Part I. General**
- 330.1 Scope.
- 330.6 Listing Requirements.

**Part II. Installation**
- 330.10 Uses Permitted.
- 330.12 Uses Not Permitted.

**Part III. Construction Specifications**
- 330.104 Conductors.
- 330.112 Insulation.

2.4.2 Nonconsecutive Numbering. Articles and sections in the documents are, in general, numbered consecutively. However, gaps or unused numbers are sometimes left for future articles and sections. Assigning numbers to new articles is the responsibility of the National Electrical Code Correlating Committee, advised by the NFPA staff editor. Assigning numbers to new sections within articles is the responsibility of technical committees, advised by the NFPA staff editor.

2.4.2.1 Parts. If an article is subdivided into parts, it is recommended that the section numbering within each part start with the next decade as a minimum to allow for future growth. New or significantly reorganized articles shall follow this numbering convention. Where an article has multiple parts, Part I shall be titled “General”.

Example:

**Article 422 Appliances**

**Part I. General**
- 422.1-422.6

**Part II. Installation**
- 422.10-422.23

**Part III. Disconnecting Means**
- 422.30-422.35

**Part IV. Construction Specifications**
- 422.40-422.48

2.4.3 Numbering Informational Notes. If there are two or more informational notes in a definition, section, or subdivision, consecutive numbering of the informational notes shall only occur in that definition, section, or subdivision.

Example:

**430.31 General.** Part III specifies overload devices intended to protect motors, motor-control apparatus, and motor branch-circuit conductors against excessive heating due to motor overloads and failure to start.

Informational Note No. 1: See Informative Annex D, Example D8.

Informational Note No. 2: See Article 100, for the definition of Overload.
These provisions shall not require overload protection where a power loss would cause a hazard, such as in the case of fire pumps.

Informational Note No. 3: See 695.7 for protection of fire pump supply conductor.

Part III shall not apply to motor circuits rated over 1000 volts, nominal.

Informational Note No. 4: See Part XI for over 1000 volts, nominal.

2.4.4 Exceptions. See 2.6.2 for the numbering of exceptions in the documents.

2.5 General References to Other Articles. If a listing is made of references to other articles under the section title “Other Articles,” the listing shall be in table format and shall comply with 2.3.

2.6 Exceptions.

2.6.1 Placement and Order. Exceptions shall immediately follow the main rule to which they apply. If exceptions are made to items such as within a numbered list or specific subdivision, the exception shall clearly indicate the items to which the exception applies. Exceptions containing the mandatory terms shall or shall not are to be listed first in the sequence. Permissive exceptions containing shall be permitted are to follow any mandatory exceptions and be listed in their order of importance as determined by the technical committee.

2.6.2 Numbering. If there are two or more consecutive exceptions, each shall be numbered.
3.1 Mandatory Rules, Permissive Rules, and Explanatory Information.

3.1.1 Mandatory Rules. Shall, shall not, and shall not be indicate mandatory rules. Terms such as is to be, shall be not, and must, whose meanings are less clear, shall not be used. The terms may or can shall not be used in mandatory rules.

3.1.2 Permissive Rules. Shall be permitted and it shall be permissible indicate allowed optional or alternate methods. (Note that these are still mandatory language and constitute rules.) The term may shall only be used where it recognizes a discretionary judgment on the part of an authority having jurisdiction or in an informational note.

Example:

The authority having jurisdiction may waive specific requirements in the Code or permit alternate methods.

3.1.3 Informational Notes. Informational notes contain explanatory information and shall be located directly after the rule they apply to. Informational notes shall only be used where necessary to support or improve usability of the associated requirement. Informational notes shall not be written in mandatory language and shall not contain requirements, make interpretations, or make recommendations. If an Informational note is needed to explain the text of the document, consideration should be given to rewriting the text of the document to make the rule clear.

3.1.3.1 Structure. Informational notes that reference a requirement or another standard shall be structured with the referenced requirement or standard identified first followed by the explanatory text.

Examples:

Informational Note: See UL 817, Cord Sets and Power-Supply Cords, and UL 62, Flexible Cords and Cables, for information on flexible cords and cables.

Informational Note: See Article 100 for the definition of General-Use Switch.

Informational Note: See ANSI/NEMA WD 6–2016, Wiring Devices — Dimensional Specifications, for receptacle configurations.

3.1.4 Exceptions. Exceptions to rules shall be used sparingly. If used, exceptions shall convey alternatives or differences to a basic rule. It is the responsibility of the technical committee to determine whether the principle can be expressed most effectively as a separate positive code rule or as an exception to a rule.

3.1.4.1 Language. Exceptions shall be permitted to use the terms shall, shall not, or shall be permitted depending on whether they specify a mandatory requirement that is (1) different from the rule, or (2) diametrically opposite to the rule, or (3) whether they permit, but do not require, a variance from the main rule. Exceptions shall be written in complete sentences.
3.1.4.2 Excessive Numbers of Exceptions. If the number of exceptions to a specific rule becomes excessive, the technical committee should consider a revision of the basic rule or a rearrangement of the section to better convey the objectives.

3.2 Word Choices.

3.2.1 Unenforceable Terms. The documents shall not contain references or requirements that are unenforceable or vague. The terms contained in Table 3.2.1 shall be reviewed in context, and, if the resulting requirement is unenforceable or vague, the term shall not be used.

Table 3.2.1 Possibly Unenforceable and Vague Terms

<table>
<thead>
<tr>
<th>Acceptable</th>
<th>Adequate</th>
<th>Adjacent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciable</td>
<td>Appropriate</td>
<td>Approximate(ly)</td>
</tr>
<tr>
<td>Available</td>
<td>Avoid(ed)</td>
<td>Can</td>
</tr>
<tr>
<td>Care</td>
<td>Consider(ed)(ation)</td>
<td>Could</td>
</tr>
<tr>
<td>Designed for the purpose</td>
<td>Desirable</td>
<td>Easy(ily)</td>
</tr>
<tr>
<td>Equivalent(ly)</td>
<td>Familiar</td>
<td>Feasible</td>
</tr>
<tr>
<td>Few</td>
<td>Frequent(ly)</td>
<td>Firmly</td>
</tr>
<tr>
<td>Generally</td>
<td>Good</td>
<td>Lightly</td>
</tr>
<tr>
<td>Likely</td>
<td>Legible(y)</td>
<td>Many</td>
</tr>
<tr>
<td>May</td>
<td>Maybe</td>
<td>Metallic(ally)</td>
</tr>
<tr>
<td>Might</td>
<td>Most(ly)</td>
<td>Near(ly)</td>
</tr>
<tr>
<td>Neat(ly)</td>
<td>Normal(ly)</td>
<td>Note</td>
</tr>
<tr>
<td>Periodic(ally)</td>
<td>Practical(ly)</td>
<td>Practices</td>
</tr>
<tr>
<td>Prefer(red)</td>
<td>Proper(ly)</td>
<td>Ready(illy)</td>
</tr>
<tr>
<td>Reasonable(y)</td>
<td>Safe(ly)(ty)</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Secure(ly)</td>
<td>Several</td>
<td>Significant</td>
</tr>
<tr>
<td>Similar</td>
<td>Substantial(ly)</td>
<td>Sufficient(ly)</td>
</tr>
<tr>
<td>Suitable</td>
<td>Usual(ly)</td>
<td>Workmanlike</td>
</tr>
</tbody>
</table>

Example of unenforceable or vague terms:

Correct: Conduit shall be supported at intervals not exceeding 3 m (10 ft).
Incorrect: Conduit shall be adequately supported at periodic intervals.

3.2.2 Expressing Maximum and Minimum Limits. Maximum and minimum limits shall be expressed with the types of wording shown in the following examples:

Examples:

Shall not exceed 300 volts to ground . . .
Shall have a clearance of not less than 5 cm (2 in). . .
Shall be supported at intervals not exceeding 1.5 m (5 ft.). . .

3.2.3 Acronyms and Uncommon Abbreviations. All acronyms and any abbreviations that are not in common use shall be spelled out with the abbreviation following in parentheses for the first use of the term in the body of each article. Each subsequent use of the term in the article shall be permitted to be the acronym or abbreviation.
only. Use of only the acronym or abbreviation for terms defined in Article 100 shall be permitted in subsequent uses throughout the document.

Examples:

**Article 100**
**Ground-Fault Circuit Interrupter (GFCI).** A device intended for the protection of personnel that functions to de-energize a circuit or portion thereof within an established period of time when a ground-fault current exceeds the values established for a Class A device. (CMP-2)

**Article 210**
**210.8 GFCI Protection for Personnel.** GFCI protection for personnel shall be provided as required in 210.8(A) through (F). The GFCI shall be installed in a readily accessible location.

**705.13 Power Control Systems (PCS).** A PCS shall be listed and evaluated to control the output of one or more power production sources, energy storage systems (ESS), and other equipment. The PCS shall limit current and loading on the busbars and conductors supplied by the PCS.

### 3.2.4 Standard Terms.
Standard terms have been established through accepted use or by definition and are to be used in preference to similar terms that do not have such recognition. Annex A provides guidance for syntax, spelling, punctuation, and usage of many standard technical terms.

### 3.2.5 Consistent Application of Terms.

#### 3.2.5.1 Ampacity.
The term *ampacity*, as defined in Article 100, applies to the current-carrying capacity of conductors only. Therefore, this term shall be used in this sense, but only in this sense. (The ampacity of a 14 AWG copper conductor with 60°C insulation is 15.) On the other hand, switches, motors, and similar equipment are not rated in ampacities. Instead, they have current ratings, voltage ratings, horsepower ratings, and so on. Such equipment, therefore, shall not be specified or referred to in “ampacity” values.

#### 3.2.5.2 Authority Having Jurisdiction (AHJ).
The term used to indicate any kind of inspection authority, enforcement authority, or the like, shall be the AHJ. The use of this term will result in standardization, and it is in keeping with the term used in all other NFPA standards. This term is fully developed and explained in Paragraph 3.3.6.1 of the *NFPA Regulations Governing the Development of NFPA Standards.*

#### 3.2.5.3 Nationally Recognized Testing Laboratory.
Use of the terms “Nationally Recognized Testing Laboratory” or “NRTL” shall be avoided. The definition of *listed* in Article 100 provides the details necessary for application in the document. The Nationally Recognized Testing Laboratory program, also known as NRTL, is an OSHA program for the accreditation of laboratories that test products for the workplace and is not to be applied generally in the document. The preferred term to use is “Qualified Electrical Testing Laboratory.”

#### 3.2.5.4 Requirements for Guarding.
Requirements for guarding shall be stated in as complete a manner as possible and in as nearly standardized form as can be reasonably achieved. For example, the two terms *protected against contact with live parts* and *protected against accidental contact with live parts* do not mean the same thing. It may be necessary for qualified persons to have access to live parts, or it may be desirable to provide varying degrees
of protection, depending on the location. Among other things, this distinction might affect the type of ventilation louvers or drains that would be acceptable for some types of equipment. The intent of the type and degree of protection should be clear.

3.2.5.5 Requirements for Protection Against Physical Damage.
If protection against physical damage is to be one of the requirements, this can be standardized by the use of this terminology instead of using the phrase provided with mechanical protection to mean the same thing. In many cases, one or two acceptable methods of providing the intended protection can be stated as examples for better understanding without restricting the rule to a specification-type requirement. There have been some cases, such as in the instance of grounding electrode conductors, where the means provided by the installer for protection against physical damage has impaired the electrical function of the conductor or equipment. This can be largely avoided by an explanatory note if the intent cannot be otherwise made sufficiently clear.

3.2.5.6 Voltage. The term voltage is well understood and shall be used in preference to other terms such as potential. Because voltage is expressed in volts, a requirement should be written to avoid repetition of this term if it is possible to do so without losing clarity.

Example:

Correct: A circuit supplying the primary of an isolating transformer shall not exceed 300 volts between conductors.

Incorrect: The voltage of a circuit supplying the primary of an isolating transformer shall not exceed 300 volts between conductors.

3.2.6 Formulas and Equations. Formulas and equations shall be expressed in standard mathematical symbols.

3.2.7 Units of Measurement.

3.2.7.1 Measurement System of Preference. Metric units of measurement are in accordance with the modernized metric system known as the International System of Units (SI).

3.2.7.2 Dual System of Units. The SI units shall appear first, and the inch-pound units shall immediately follow in parenthesis. In tables the SI and inch-pound units shall appear in separate columns.

3.2.7.3 Trade Sizes. Where the actual measured size of a product is not the same as the nominal size, trade size designators shall be used rather than dimensions. Trade practices shall be followed in all cases.

3.2.7.4 Extracted Material. Where material is extracted from another standard, the context of the original material shall not be compromised or violated. Any editing of the extracted text shall be confined to making the style consistent with that of the documents.

3.2.7.5 Industry Practice. Where industry practice is to express units in inch-pound units, the inclusion of SI units shall not be required.
3.2.7.6 **Safety.** Where hard conversion to SI would have a negative impact on safety, the soft conversion shall be used.

3.2.7.7 **Approximate Conversion.** The conversion from inch-pound units to SI units shall be permitted to be an approximate conversion.

3.2.7.8 **Standard Conversions.** See Annex B for information on standard conversions.

3.2.7.9 **Units.** For dimensions less than 1 m, the SI unit shall be expressed as mm. For dimensions from 1 m to less than 1 km, the SI units shall be expressed in m. For dimensions of 1 km or greater, the SI units shall be expressed as km.

3.3 **Writing Style.** These guidelines shall be followed to help produce clear, unambiguous language.

3.3.1 **General Guidelines.**

3.3.1.1 Write in present tense; do not write in future tense.

**Example:**

**Correct:** No conductor shall be used in such a manner that its operating temperature exceeds that designated for the type of insulated conductor involved.

**Incorrect:** No conductor shall be used in such a manner that its operating temperature will exceed that designated for the type of insulated conductor involved.

3.3.1.2 Use simple declarative sentence structure, and keep sentences short. Writing rules in long sentences full of commas, dependent clauses, and parenthetical expressions often creates confusion and misunderstanding. The requirement can be written in two or more short sentences, expressed using a list or table, or both.

**Example:**

**Correct:**

(A) **Occupancy Limitation.** In dwelling units and guest rooms or guest suites of hotels, motels, and similar occupancies, the voltage shall not exceed 120 volts, nominal, between conductors that supply the terminals of the following:

(1) Luminares
(2) Cord-and-plug-connected loads 1440 volt-amperes, nominal, or less than \( \frac{1}{4} \) hp

(B) **120 Volts Between Conductors.** Circuits not exceeding 120 volts, nominal, between conductors shall be permitted to supply the following:

(1) The terminals of lampholders applied within their voltage ratings
(2) Auxiliary equipment of electric-discharge lamps

**Incorrect:**

(A) **Occupancy Limitation.** In dwelling units and guest rooms or guest suites of hotels, motels, and similar occupancies, the voltage shall not exceed 120 volts, nominal, between conductors that supply the terminals of luminaires and cord-and-plug-connected loads 1440 volt-amperes, nominal, or less than \( \frac{1}{4} \) hp.

(B) **120 Volts Between Conductors.** Circuits not exceeding 120 volts, nominal, between conductors shall be permitted to supply the terminals of lampholders applied within their voltage ratings and auxiliary equipment of electrical-discharge lamps.
3.3.1.3 Use common words and avoid overly complex terminology (see 3.3.4).

3.3.1.4 Use positive language, rather than negative, wherever possible.

   Example:
   
   **Correct:** Boxes used in wet locations shall be listed for wet locations.
   
   **Incorrect:** Ordinary electrical boxes shall not be used in wet locations.

3.3.1.5 If possible, avoid using dependent clauses, parenthetical phrases, and unclear inverted word order.

3.3.2 Lists and Tables. If possible, use lists or tables to present requirements, rather than long text descriptions.

3.3.3 Plural. Unless referring to a single item of equipment, references to electrical components and parts shall be plural rather than singular. This results in greater consistency and makes it clear that the requirement refers to *all* components or parts of a given type or class.

   Examples:
   
   **Correct**
   Luminares
   Receptacles
   Switches and circuit breakers
   Outlet boxes and enclosures
   Installations shall...
   
   **Incorrect**
   a luminaire
   a receptacle
   a switch or circuit breaker
   an outlet box or enclosure
   an installation shall...

3.3.4 Word Clarity. Words and terms used in the documents shall be specific and clear in meaning, and shall avoid jargon, trade terminology, industry-specific terms, or colloquial language that is difficult to understand. Language shall be brief, clear, and emphatic. The following are examples of old-fashioned expressions and word uses that shall not be permitted:

*Above or below* (referring to text) — avoid using to describe the location of text.

   Example:
   
   **Correct:** ...shall be in accordance with 250.21(A)(3)(a), (A)(3)(b), and (A)(3)(c).
   
   **Incorrect:** ...shall be in accordance with (a), (b), and (c) below.

*And such, and the like* — it is preferable to rearrange the sentence to use *such as* followed by examples.

*As allowed* — Use *allowed* instead.

*Herein* — Usually this word can be dropped without affecting clarity. Otherwise say “in this section” or whatever else is actually meant by *herein*.

*If* — Use to indicate a condition.
Provided that — Use if instead.

Thereof — Rewrite sentence to say of or of them.

Utilize — Use use instead.

When — Use to express time.

Where — Use to convey a location or a situation. Not to be used to express time.

3.3.5 Parallel Construction. Parallel construction means stating similar requirements in similar ways for greater consistency. This helps makes the document clear for users. Lack of consistency often creates confusion, causing users to ask: Does this difference in wording represent a different requirement? Or is it simply two different ways of trying to say the same thing? There are several kinds of parallel construction:

3.3.5.1 Organization and Numbering. See 2.4.1.

3.3.5.2 Sections. Different sections, within the same article, that reflect similar or closely related subjects, should have similar structures.

3.3.5.3 Lists. All items in a list should be parallel (that is, singular or plural, written in the same verb tense, using phrases or sentences but not a mix).
4.1 References to Other Rules Within the Documents.

4.1.1 In the National Electrical Code (NFPA 70). General requirements contained in Chapters 1 through 4 shall not be repeated in other articles of the document. Committees shall always be mindful of the structure of the document as specified in 90.3 when contemplating the inclusion of a reference to another requirement. The use of redundant references shall be avoided. Only include references to other requirements within the document.

4.1.2 In Other Documents. General requirements contained in Chapter 1 shall not be repeated in other articles of the document. Committees shall always be mindful of the structure of the document as specified in 90.3 when contemplating the inclusion of a reference to another requirement. The use of redundant references shall be avoided. Only include references to other requirements within the document.

4.1.3 Reference Structure. If used, references from documents covered by this manual shall include only the section number being referenced. The word section shall not be used unless the reference is used at the beginning of a sentence. References shall indicate the subject of the rules being referenced; the subject shall follow the number. Requirements shall be referenced directly by using the phrase in accordance with. The phrase in accordance with the provisions of should not be used where referencing a requirement.

Explanatory references shall be in informational notes and shall be structured as shown, using the word “See” followed by the reference and an explanation of the reference.

Example:

Informational Note: See 250.118 for acceptable grounding means.

Informational Note: See NFPA 101-2018, Life Safety Code, Section 7.8, for information on illumination of means of egress.

Informational Note: See Article 100 for the definition of Overload.

4.1.4 References to a Part Within an Article. Except for Article 100, references shall not be made to an entire article. References to parts within articles shall be permitted.

Example:

If a switch or circuit breaker serves as the disconnecting means, it shall be within sight from the motor controller and shall comply with Part IX of Article 430.

4.2 References to Other Standards. References to other standards shall not be contained in mandatory requirements. References to standards shall be permitted in informational notes.

4.2.1 Informative Annex A. Annex A shall contain two parts.

4.2.1.1 Part I. Part I shall contain the relevant product safety standard(s) for conductors and equipment that have an associated listing (certification) requirement in the document. The annex entry shall identify the document section requiring the listed (certified) product and the number and title of the related product safety standard. The edition dates are not mandatory.
4.2.1.2  **Part II.** If conductors and equipment do not have an associated listing (certification) requirement in the document, a technical committee may include the relevant product safety standard(s) as additional information in Part II of Annex A. Each informational annex entry shall identify the relevant document section and the number and title of the related product safety standard. The edition dates are not mandatory.

4.3  **Extracted Material.**

4.3.1  **Extracted Material from an NFPA Document.** Extracting provides an advantage over multiple references to requirements contained within other NFPA documents. Extracting has the disadvantage of creating a situation where the text of the source document and the user document are not identical due to different revision cycles.

4.3.2  **Extract Requirements.** To extract material from another NFPA document, the requirements in 4.3.2.1 through 4.3.2.3 shall be met.

4.3.2.1  **Reason.** There shall be a specific technical reason for the extract.

4.3.2.2  **Context.** A section or paragraph being extracted from another document shall represent a complete thought and shall be entirely extracted. The context of the original material shall not be compromised or violated. Any editing of the extracted text shall be confined to making the style consistent with that of the *NEC Style Manual* and then only with the concurrence of the committee having primary jurisdiction. Such concurrence shall be obtained through the staff liaison for the source document.

4.3.2.3  **Identification.** If used, the number, title, and edition of the NFPA document from which extracted material is taken shall appear as the first informational note following the scope section. The document number and paragraph from which the extracted material is taken shall appear in brackets at the end of the section in which the extracted material is used.

Example:

**Article 514 Motor Fuel Dispensing Facilities**

**524.1 Scope.**

This article shall apply to motor fuel dispensing facilities, marine/motor fuel dispensing facilities, motor fuel dispensing facilities located inside buildings, and fleet vehicle motor fuel dispensing facilities.

**Informational Note No. 1:** Text that is followed by a reference in brackets has been extracted from NFPA 30A-2018, *Code for Motor Fuel Dispensing Facilities and Repair Garages*. Only editorial changes were made to the extracted text to make it consistent with this *Code*.

514.11(B) **Attended Self-Service Motor Fuel Dispensing Facilities.** At attended motor fuel dispensing facilities, the devices or disconnects shall be readily accessible to the attendant. [30A:6.7.1]
Standard Terms
The following list provides guidance for syntax, spelling, punctuation, and usage for many of the standard terms used in the documents. Many words are listed with an abbreviation to indicate usage. For example, adjective = a, noun = n, and verb = v.

A
abovegrade (a)
aboveground (a)
acknowledgment (no e)
adapter
adjustable-speed (a)
affect (v) = to influence; effect (n) = result
air conditioner (n)
air-condition (v)
air-conditioning (a)
aireflow (a,n)
airtight (a)
airspace (a)
air-handling (a)
alternating current (n) (abbrev. ac)
alternating-current (a) (abbrev. ac)
American Wire Gage (abbrev. AWG)
ampacity
ampere (see units of measurement)
20-ampere–rated receptacle
and/or (try to avoid)
apparatus (singular and plural)
approved
arc fault (n)
arc-fault (a)
arrester (not arrestor)
at least (avoid; use not less than to indicate minimum dimension)
autoignition
authority having jurisdiction (abbrev. AHJ)
automatic-reset (a)

B
backfeed
backfill (n,v)
backup (a,n)
back-wiring spaces
belowgrade (a)
belowground (a)
bipolar
braid-covered (a)
branch circuit (n)
branch-circuit (a)
branch-circuit ground-circuit
branch-circuit overcurrent device
buildup (n)
build up (v)
busbar
buses
busing
C
  cable tray
  cablebus
  capacitors
  ceiling-suspended (paddle) fan
  circuit-grounding connection
  circuit-interrupting device
  circuit-protective device
  circular mil (a)
  Class I location
  Class I, Division 2, location
  clean-up (n)
  cleanup (v)
  closed-circuit (a)
  Code (initial cap and italic when referring to the NEC)
  cold-storage warehouse
  combination-load equipment
  common-return (a)
  communications system, utilities, equipment, and so on (not communication)
  concrete-encased electrode
  conductive-film heating elements
  continuous current rating
  control boards
  control circuit (a)
  constant-current systems
  copper (Cu)
  copper-clad (a)
  cord- and plug-connected appliances
  corner-grounded delta systems
  corrosion-resistant (a)
  counter space
  counter-mounted (a)
  countertop
  crawl space
  cross members
  cross-connect arrays
  cross section (n)
  cross-sectional (a)
  cubic inches (in.) (see units of measurement)
  current-carrying (a)
  current-limiting (a)
  cut off (v)
  cutoff (a,n)
  cutouts (n)

D
  data (singular and plural, use with plural verb)
  dead-front switchboards
  de-energize
  deicing
  delta [use symbol (Δ) in equations]
  delta-connected (a)
  delta corner grounded
  derating
  Design B motor
  dipole (a)
  direct buried (n)
  direct-buried (a)
  direct current (n) (abbrev. Dc
  direct-current (a) (abbrev. dc)
disconnecting means (not disconnection means)
dripproof
drywall
dual-element fuses
ducts (as in air-handling ducts, not for use with raceways)
ductwork
dust-ignitionproof (a)
dustproof (a)
dusttight (a)

effect (n) = result; affect (v) = to influence
e.g. (avoid using, use instead for example)
electric/electrical (use to be determined by staff)
electrical (as applied to requirements, standards, codes)
electric-discharge lighting
energized (electrically connected to a source of voltage
gine–generator set
ensure (not insure)
equipment (singular and plural) equipment grounding
conductor
etc. (try to avoid, use and so on, and so forth, or such as)
Exception No. 1 (when referring to specific exception)
Exception Nos. 1 and 2 (more than one exception)
exception (general, lowercase if used alone)
explosionproof
extra-hard usage

F
faceplate (n)
face-up position
fault-interrupting device
fault–current forces
fiberglass reinforced
field connection box
field-installed (a)
fire alarm circuit
fire-extinguishing equipment
fire-resistant construction
fireproof
firestopped
fixed, electric space-heating equipment
fixed-load (a)
fixed stage equipment
flame retardant (n)
flame-retardant (a)
flat-top raceways
fluxes
foamed-in-place material
forced-air system
full-load current
full-load rating
full-voltage resistor
fuseholder
G
- gal (plural), 3-gal (a)
- gas–air (a)gauge, not gage
- general-purpose (a)
- general-use (a)
- gray buses
- grain-drying systems
- grid-connected systems
- grille
- ground-fault circuit interrupter (n) (abbrev. GFCI)
- ground-fault circuit-interrupter (a) (abbrev. GFCI)
- ground-fault (a)
- ground fault (n)
- ground-fault protective device
- grounding electrode conductor
- guarding
- guest rooms

H
- hand-carried (n)
- hand-held (a)
- hand-supported (a)
- handhole (n)
- handlamp (n)
- hazardous (classified) location
- headroom (n)
- heat-generating equipment
- heat-resistant (a)
- heavy-duty (a)
- hertz (rather than cycles per second) (see units of measurement)
- high-heat type
- high-impedance grounded neutral system
- high-leg (a)
- high-pressure (a)
- high-tension (a)
- higher-rated (a)
- horsepower (see units of measurement)
- hour (do not abbreviate)

I
- i.e. (avoid using, use that is)
- if (indicates condition -- can usually be used instead of provided, provided that, or where)
- igniter
- ignitible (not ignitable)
- impedance
- impedance grounded neutral system
- in-between (a,n)
- indexes (not indices)
- informational note (lower case when used alone in text)
- inrush current
- instantaneous-trip (a)
- internal-combustion-driven (a)

K
- knob-and-tube wiring

L
- lampholder
- lead-sheathed (a)
less-flammable transformers
let-through (n)
light-emitting diode (abbrev. LED)
likely (use instead of liable)
likely to become energized -- failure of insulation on
line-to-ground fault current
line-to-neutral loads
liquidtight (a)
live parts (electric conductors, buses, terminals, or components that are uninsulated or exposed and shock
hazard exists)
load-interrupter (a)
load-side (a)
locked-rotor (a,n)
locknut (n)
long-time rating
low-power-factor (a)
low-voltage (a)
lower-rated (a)

M
make-or-break (a)
manhole
maximum
meatpacking (a,n)
messenger-supported (a)
metal (instead of metallic)
metal-clad (a)
metal-enclosed switchgear (n)
metal-sheathed (a)
metal-shield connectors (n)
mineral-insulated (a)
minimum
minute (do not abbreviate)
mixer–amplifier (n)
motor control (a)
motor-circuit switch (n)
motor-compressors (n) motor-driven (a)
motor-generator (a)
motor-generator set (abbrev. MG set)
motor-starting currents
multibuilding
multiconductor (instead of multiple-conductor or multi-conductor)
multimedia
multioutlet
multiphase
multipole

N
nameplate
nameplate rating load
NEC ® (always italic, with registered trademark on first reference)
network-powered (a)
No. 20 gauge sheet metal
non–current-carrying (a)
non–grounding-type (a)
non–power-limited (a)
nonaccessible
noncontinuous
noncurrent
nondwelling unit (a)
nonexplosionproof
nonflexible noninductive
noninterchangeability
nonmetallic
nonmetallic-sheathed (a)
nonsheathed cable
nontime
not over (instead of *not more than*)
not exceeding (instead of *not more than*)
not less than

O
off-premises source
oil-break (a)
oil-filled reactors
on-premises source
open-conductor supports
open-resistance (a)
optical fiber (a)
other than a dwelling unit (avoid, use *nondwelling*)
overcurrent device
overcurrent protective device
overtemperature (n)
over-temperature (a)
overvoltage (n)

P
panelboard
parallel (instead of multiple conductors)
part-winding start induction
pendant
phase-to-phase (a)
photovoltaic
plug-in units
pole-mounted (a)
positive-pressure ventilation
power conversion system (abbrev. PCS)
power factor (abbrev. PF)
power-conditioning unit (abbrev. PCU)
power-limited (a)
power-supply cord
practicable (means feasible)
practical (means useful)
pre-amplifier
pressure terminal connectors
pressure splicing connectors
protection against physical damage (state conditions)
protector
PVC-coated (a)

R
raceway
re-fused (a)
rectifier-derived dc system
remote-control (a)
resistance temperature device (abbrev. RTD)
resistor
revolutions per minute (abbrev. rpm)
road show (a,n)
root-mean-square (a)
runoff (n)

S
screw shell
screw shell devices
second (referring to time; do not abbreviate)
secondary-circuit fault protection
secondary-to-primary (a)
semiconducting (a)
service-disconnect enclosure
service disconnecting means
service-drop conductors s
service-entrance conductors
service-lateral conductors
service-supplied ac (a)
set screw type (a)
set screw (n)
sheet metal (a)
short circuit (n)
short-circuit and ground-fault protective device
short-circuit current ratings
short-time duty
shunt-trip sidelight
side-wiring spaces
silicon controlled rectifier (abbrev. SCR)
single-conductor cable
single-phase (not 1-phase, but 2-phase, 3-phase, etc.)
single-pole (a)
skin-effect heating
small-appliance branch circuit
solid-state (a)
space-heating equipment
specific-purpose (a)
stage-lighting (a)
stage set lighting
steady-state current
steel-frame (a)
storage battery charging equipment
strain-relief (a)
strut-type (a)
sunlight-resistant (a)
sunroom
supply-side equipment
surface metal raceway
surge arrester (n)
surge-arrestor (a)
surge-protective capacitors
switchboards

T
tamper-resistant (a)
temperature-rated (a)
tenpenny nail
that (use where phrase is directly related to statement; do not set off with comma)
through (instead of thru or from and to)
time-current characteristics
time-delay fuse
toward (not towards)
trip-type (a)
turnbuckle (n)
Type MI cable

U
under-carpet (a)
upon (overused, try to avoid; on usually correct)

V
voltage
voltage-drop (a)
volt (see units of measurement)
voltmeter

W
wall switch-controlled (a)
weatherproof
wet-pit (n)
when (condition of time)
where (location or situation)
which (additional information in a phrase; set off with commas)
3-wire (a)
wire-bending space
workmanlike (avoid, unenforceable)
workplace
workspace
wye circuit (n)
wye-connected (a)

X
X-ray (not X-Ray)
Units of Measurement

In the text, all units of measure, when accompanied by a number value, will be styled as follows:

- feet (foot) ft
- meter m
- inch in.
- centimeter cm
- millimeter mm
- square feet ft²
- square meter m²
- square inch in.²
- square centimeter cm²
- square millimeter mm²
- cubic feet per minute ft³/min
- pounds lb
- kilograms kg
- degrees Celsius °C
- degrees Fahrenheit °F
- degree (angle) degrees
- percent percent
- thousand circular mils kcmil
- horsepower hp (spelled out in heads)
- hertz Hz
- kilovolt kV
- kilowatt kW
- kilovolt-amperes kVA
- kilovolt-amperes reactive kVAR
- volt volt [abbreviate volt (V) when used with a
  number to mean rating]
- ampere amphere
- watt watt
- volt-ampere volt-ampere (spell out in heads)
- megavoltampere MVA
- milliamperes mA
- millivolt mV
- millivoltampere mVA
- milliwatt mW
- micrometer m
- microjoule mJ
- joule J
- kilojoule kJ
- gallon gal
Display text (tables, figure callouts, equations, and examples)
Units of measure are abbreviated as follows in display text. Exception: If units are used without a number preceding in a table title or table column head, units should be spelled out.

kilovolt \( kV \)
kilowatt \( kW \)
volt \( V \)
ampere \( A \)
volt-ampere \( VA \)
kilovolt-ampere \( kVA \)
percent \( \% \)
thousand circular mils \( kcmil \)
degrees Celsius \( °C \)
degrees Fahrenheit \( °F \)

Hyphenation

Hyphenate all units of measurement when used as adjectives before a noun, except when multiple units of measurement are used in the same phrase.

Example: a 5.5-kW, 240-volt dryer
         a 2 in. x 2 in. x 2 in. box

Numbers

0.1 (use place-holding number before decimal)
0 through 2000 (use through to express range)
1000 (no comma in 4-digit numbers)
10,000
2 ½ (use case fraction)
first (not 1st)
### Annex B

#### Conversion Reference Table

<table>
<thead>
<tr>
<th>U.S. Customary Unit</th>
<th>Existing SI Unit</th>
<th>Proposed SI Unit</th>
<th>Equivalent U.S. Unit</th>
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September 22, 2020

Dawn Michele Bellis  
NFPA Standards Council Secretary  
1 Batterymarch Park  
Quincy, MA 02169-7471

Subject: NFPA Standards Council use of Listed vs. Certified

Dear Ms. Bellis,

The NFPA defined term “Listed” has long been used by Underwriters Laboratories to identify products which have passed testing at their laboratories. While there are other testing labs, both in the United States and internationally, the UL mark still resides on most of the products of the NEMA Fire, Life Safety, Security and Emergency Communication (3SB) Section and, we suspect, of many products manufactured by NEMA Members. Therefore, this nomenclature has been the generally accepted term and was consistent between NFPA and UL.

In the past few years, however, UL has moved to the term “certified” for smoke alarms and detectors tested to the newest Standards. This term has replaced “listed” on the labels affixed to the newest products. As a result, there has been confusion in the field with some AHJs saying the product says “certified” and, as a result, is not “listed” as required. In NFPA terminology, “certified” has a variety of definitions, unlike listed, which adds to the confusion.

These are only two of a list of proliferating UL terms that will appear on various products. (See here: https://marks.ul.com/about/ul-listing-and-classification-marks/promotion-and-advertising-guidelines/specific-guidelines-and-rules/)

At the same time, other Nationally Recognized Testing Laboratories use different terms: ETL can use certified or listed, depending on the country and product. FM Approvals says they approve or certify products.

While the current confusion is primarily around new smoke alarms and smoke detectors, we anticipate the potential for increasing problems in the field as contradictory terminology is used.

THEREFORE, we ask that the NFPA Standards Council review the current and evolving terminology and consider making changes to official NFPA definitions, including that for “listed.”

Sincerely,

Megan A. Hayes, AStd
a. Explain the Scope of the new project/document:

Create a standalone NFPA code for the establishment of a minimum construction standard for Food Producing Vehicles that are considered necessary to provide protection from loss of life, illness, or injury, from fire, explosion or exposure. This project shall take the place of all existing taskforces currently working separately and independently for the development or update of information for NFPA 1, 58 & 54, 96, and any other code source in development of “Food Truck” expectations / requirements.

b. Provide an explanation and any evidence of the need for the new project/document:

As all food trucks have inherent differences from typical vapor distributions systems, trying to fit the food producing vehicle standard into NFPA 58 and 54 does not make sense. Nor, based on all the nuances present within a food producing vehicle does it make sense to split the requirements between multiple code standards. Similarly to the methodology that went into NFPA 1192, an all-encompassing standalone construction standard is warranted to address all expectations, inclusive of propane, cooking equipment, ventilation, power generation, wiring, piping, fire protection, storage, refrigeration, climate control, access and egress, fresh water, gray water, sanitation, gas leak detection, container placement, and likely countless others.

Recognizing that there are already several groups working in support of adding a standard to multiple separate code pamphlets, it is conceivable they are working in opposition or at least independently towards the common objective. Following a recent review of the 2018 International Fire Code requirements for Food Producing Vehicles there are a vast number of inconsistencies that exist between this and other recognized and generally accepted good engineering practices. An effective process to eliminate potential redundancy, or code creep would be to develop a uniform taskforce consisting of members from all of the different code committees to establish one standard for food trucks, independent from the existing codes.

Using a subsection of those responsible for the 5 code standards mentioned previously and likely others, chapters could be written for each food producing vehicle construction component / system, establishing clear guidelines for critical fire, life safety and health standards and expectations.

Based on the lack of a single uniform standard for the construction of Food Producing Vehicles to date, varying and contradictory regulations have been published by local jurisdictions, as well as within the separate code sectors, as everyone scrambles to create something in the absence of any clear leader taking control. This reactionary process that has been forced on “standard creating bodies” and will continue to perpetuate until someone uniformly takes control.

Through the creation of one Technical Standards Committee focused on creating an independent construction standard for food trucks in the spirit of NFPA 1192, leveraging the knowledge of all aspects of the life, health, safety, and construction needs for food producing vehicle development and operation, a uniform expectation can be developed, communicated, and implemented.

Food Producing Vehicle season across much of the country will be starting shortly and in a post COVID-19 world restaurateurs worldwide are being forced to reconsider how to deliver meals to people while social distancing. This could result in a large number of restaurant owners removing cooking equipment from their restaurants and setting up mobile kitchens, knowing that there is no value in reopening with half occupancy in high rent areas. In my opinion we are well behind where we need to be based on the likely result of this pandemic.

c. Identify intended users of the new project/document:

Fire Code Officials; Department of Licenses and Inspections; Food Producing Vehicle Builders; Food Producing Vehicle Operators; Mobile Food Producing Equipment, Appliance, and Component Manufacturers; Vehicle / Trailer Manufactures; Health Inspectors; Fire Departments; Insurance Companies, Event Coordinators, LPG Suppliers, Code Sectors, Legislative Bodies, and Authorities Having Jurisdiction (at large).

d. Identify individuals, groups and organizations that should review and provide input on the need for the proposed new project/document; and provide contact information for these groups:
Food Producing Vehicle Manufacturers; Fire Code Officials; Food and Drug Administration; Food Producing Vehicle Associations; Industry Trade Associations; Component Manufacturers; Department of Health Officials; Members of NFPA 1, 54, 58, & 96 Technical Committees, Authorities Having Jurisdiction, Support Industry Partners, Insurance Companies, and Mechanical Inspectors

e. Identify individuals, groups and organizations that will be or could be affected, either directly or indirectly, by the proposed new project/document, and what benefit they will receive by having this new document available:

Fire Code Officials; Department of Licenses and Inspections; Food Producing Vehicle Builders; Food Producing Vehicle Operators; Mobile Food Producing Equipment, Appliance, and Component Manufacturers; Vehicle / Trailer Manufactures; Health Inspectors; Fire Departments; Insurance Companies, Event Coordinators, LPG Suppliers, Code Sectors, Legislative Bodies, and Authorities Having Jurisdiction (at large) will all benefit from the development of this new standard as it will endeavor to create a single source of expectations defining clear safety and health related construction and operational standards for food producing vehicles.

f. Identify other related documents and projects on the subject both within NFPA and external to NFPA:

NFPA 1, 54, 58, 96, 1192, ICC 2018 International Fire Code, and FDA Food Code 2017

g. Identify the technical expertise and interest necessary to develop the project/document, and if the committee membership currently contains this expertise and interest:

Food Producing Vehicle Manufacturers; Fire Code Officials; Food and Drug Administration; Food Producing Vehicle Associations; Industry Trade Associations; Component Manufacturers; Department of Health Officials; Members of NFPA 1, 54, 58, & 96 Technical Committees, Authorities Having Jurisdiction, Support Industry Partners, Insurance Companies, and Mechanical Inspectors

h. Provide an estimate on the amount of time needed to develop the new project/document:

This project needs to be expedited with a projected delivery date of no later than January of 2021.

i. Comment on the availability of data and other information that exists or would be needed to substantiate the technical requirements and other provisions of the proposed new project/document:

NFPA 1, 54, 58, 96, 1192, ICC 2018 International Fire Code, and FDA Food Code 2017

Please send your request to:
NFPA
Codes and Standards Administration
1 Batterymarch Park
Quincy, MA 02169
Stds admin@nfpa.org
Rev. 6/16

Signature: [Signature]
Name: Christopher J Wagner
Email: Christopher.Wagner@amerigas.com
Affiliation: AmeriGas Propane L.P.
TO: Standards Council

CC: Dawn Michele Bellis, Standards Council Secretary

FROM: Tracy Vecchiarelli, on behalf of the TC on Venting Systems for Cooking Appliances

DATE: October 27, 2020

SUBJECT: New Project on Mobile Food Establishments/Mobile Cooking Operations

The TC on Venting Systems for Cooking Appliances held a brief meeting to discuss the new proposed project and of those in attendance, the majority were in favor of supporting the project.

NFPA 96 currently includes requirements for food trucks, however expanding those requirements into a stand-alone document would be beneficial. A new document could address a broader range of mobile establishments (i.e. food trucks, mobile cooking, unmotorized, temporary) and expand the requirements to include electrical and structural provisions.

Please note the TC was not balloted on this topic and was encouraged to submit individual comments. Of those in attendance, no one expressed opposition to the project.
Good idea.
Much needed.
Please proceed.

All the best,

Alex Spataru
CEO

The Adept Group, Inc.
LA, CA 90024
Maynard, Mary

From: Wagner, Christopher J. <Christopher.Wagner@amerigas.com>
Sent: Wednesday, September 23, 2020 10:18 AM
To: stds_admin
Subject: Comments on New Project on Mobile Food Establishments/Mobile Cooking Operations

Good morning,

I am highly in favor of the creation of a standalone NFPA code for the establishment of a minimum construction standard for Food Producing Vehicles that are considered necessary to provide protection from loss of life, illness, or injury, from fire, explosion or exposure. I recommend this project take the place of any and all existing taskforces currently working separately and independently for the development or update of information for NFPA 1, 54, 58, 96, and any other code source in development of “Food Truck” expectations / requirements.

As all food trucks have inherent differences from typical vapor distributions systems, trying to fit the food producing vehicle standard into NFPA 58 and 54 does not make sense. Nor, based on all the nuances present within a food producing vehicle does it make sense to split the requirements between multiple code standards. Similarly to the methodology that went into NFPA 1192, an all-encompassing standalone construction standard is warranted to address all expectations, inclusive of propane, cooking equipment, ventilation, power generation, wiring, piping, fire protection, storage, refrigeration, climate control, access and egress, fresh water, gray water, sanitation, gas leak detection, container placement, and likely countless others.

Recognizing that there are already several groups working in support of adding a standard to multiple separate code pamphlets, it is conceivable they are working in opposition or at least independently towards the common objective. Following a recent review of the 2018 International Fire Code requirements for Food Producing Vehicles, there are a vast number of inconsistencies that exist between this and other recognized and generally accepted good engineering practices. An effective process to eliminate potential redundancy, or code creep would be to develop a uniform taskforce consisting of members from all of the different code committees to establish one standard for food trucks, independent from the existing codes.

Using a subsection of those responsible for the 5 code standards mentioned previously and likely others, chapters could be written for each food producing vehicle construction component / system, establishing clear guidelines for critical fire, life safety and health standards and expectations.

Based on the lack of a single uniform standard for the construction of Food Producing Vehicles to date, varying and contradictory regulations have been published by local jurisdictions, as well as within the separate code sectors, as everyone scrambles to create something in the absence of any clear leader taking control. This reactionary process that has been forced on “standard creating bodies” and will continue to perpetuate until someone uniformly takes control.

Through the creation of one Technical Standards Committee focused on creating an independent construction standard for food trucks in the spirit of NFPA 1192, leveraging the knowledge of all aspects of the life, health, safety, and construction needs for food producing vehicle development and operation, a uniform expectation can be developed, communicated, and implemented.

Food Producing Vehicle market growth will become an even greater potential in a post COVID-19 world. Restaurateurs worldwide are being forced to reconsider how to deliver meals to people while social distancing. This could result in a large number of restaurant owners removing cooking equipment from their restaurants and setting up mobile kitchens, knowing that there is no value in reopening with half or one quarter occupancy in high rent areas. In my opinion we are well behind where we need to be based on the likely result of this pandemic.
Hello,

Please see below in red.

1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to minimum fire and life safety provisions for mobile food establishments? Yes, very much

2. Please state your reason(s) for supporting or opposing such standards development. These traveling restaurants have many of the same hazards as a brick and mortar restaurant with a unique challenge of being mobile. It is a good practice to provide a uniform standard for the fire service to enforce. This will also provide customer service to the food truck industry as they will know what each jurisdiction is looking for. There have been many explosions and multiple deaths due to these trucks.

3. Are you or your organization interested in applying for membership on the Technical Committee if the Standards Council initiates development activities on the proposed project? If yes, please submit an application, in addition to your comments in support of the project: Submit online application* I am interested. I am the SE Regional Director for FFMIA and will be applying as I was on a local County committee for food trucks and on the NFPA 96 task group for mobile cooking operations.

Tommy Demopoulos, CFI, CFPE, CFPS, CFEI, FO, FM
Assistant Fire Marshal | Fire Rescue Department
6000 Hiatus Road, Tamarac, FL 33321
Tel: (954) 597-3800 | Fax: (954) 597-3810
www.tamarac.org

Customers can pay for invoices online at www.tamarac.org/invoices.
Regarding the following questions on Mobile Food Establishments:

1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to minimum fire and life safety provisions for mobile food establishments? No.

2. Please state your reason(s) for supporting or opposing such standards development.
   From a code perspective, we do not regulate fuel trucks driving on the road because they are regulated by DOT. Since these mobile food establishments are a commercial vehicle, DOT regulations also apply to them. As AHJ’s we do not require an Inspection and Operational Permit of every work truck kept at someone’s residence or in front of their residence that has an oxygen/acetylene set up or multiple acetylene tanks on it. From a jurisdictional enforcement perspective, this is literally a moving target and overregulates this industry by requiring inspection by each AHJ they set up shop in from Business Licensing, Health, possibly Parking Enforcement, etc.
   I was opposed to ICC including regulations in the 2018 IFC.

Respectfully,

Dale Way
Deputy Fire Chief – Fire Prevention | Truckee Meadows Fire & Rescue
dway@tmfpd.us | Office: 775.326.6000
3663 Barron Wy, Reno, NV 89511

"Committed to excellence, service, and the protection of life and property in our community"
As a member of the NFPA 96 technical committee for a number of years, I am familiar with all of the discussions and work that the committee has done to address the issues related to “food trucks”. Having been involved in fire protection for nearly 40 years I have dealt with untold numbers of fire code officials who were unaware that the requirements of NFPA 96 were applicable to such operations.

Developing the requirements which were contained in NFPA 96, 2017 edition in Annex B was the first step and these were refined in the 2020 edition with the creation of Chapter 17.

My experience is that many code officials still are unaware of the “food truck” requirements in NFPA 96. Believe this is due to the large number of jurisdictions which utilize the ICodes which do not reference NFPA 96. Further, I am aware than many code officials and jurisdictions have taken the position that “fire codes”, such as NFPA 1 and the IFC do not apply to “food trucks” because they are mobile and not structures. Such positions make incorporating the “food truck” requirements in the “fire codes” an ineffective approach.

I believe there is an analogy in what is occurring throughout the country dealing with “food trucks” to what occurred back in the 1980’s with fire sprinklers. In the early 1980’s there was NFPA 13 and NFPA 13D and nothing in between. This lead to numerous jurisdictions developing their own “home grown” requirements for sprinklers in occupancies such as apartments, hotels and motels. This lead to the development of NFPA 13 R so that there was a universal, consistent standard. Going back even further, one of the reasons that NFPA was first formed was to develop a national standard for fire sprinkler standards.

Today, we have numerous jurisdictions who have or who are developing their own “home grown” requirements for “food trucks”. This leads to gross inconsistencies across the country. How can we expect a designer/manufacturer or operator of such a facility to be able to comply with requirements that can vary substantially from one jurisdiction to another?

There is clearly a justifiable need for NFPA to develop a stand-alone standard for “food trucks” that addresses not only ventilation, fire protection, cooking equipment but appropriate requirements for electrical and gas systems as well as applicable vehicle design/construction issues.

The new committee should include members of the current NFPA 96 committee along with individuals representing the design, construction and operation of “food trucks”. It would also be helpful to have a designated representatives from the NFPA 54, 58 and 70 committees.

James G. Munger, PhD, FiFireE, CFPS, BCO
Partner
Q-Dot Engineering, LLC
Maynard, Mary

From: Fredenburg, Richard G <richard.fredenburg@ncagr.gov>
Sent: Thursday, October 1, 2020 1:16 PM
To: stds_admin
Subject: New Project on Mobile Food Establishments/Mobile Cooking Operations

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

1. Are you, or your organization, in favor of the development of an NFPA Standard pertaining to minimum fire and life safety provisions for mobile food establishments?

   Speaking as the chair of a working group to establish requirements for LP-Gas systems in mobile food facilities under the Technical Committee on Liquefied Petroleum Gases, the working group feels that a standard pertaining to minimum fire and life safety provisions for mobile food establishments is appropriate. The committee for this standard should draw from the expertise of the many disciplines involved in the mobile system commonly known as a food truck.

2. Please state your reason(s) for supporting or opposing such standards development.
   - The current rules pertaining to mobile cooking operations, “food trucks,” is a mishmash of rules in a variety of documents.
   - NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, took a major step toward putting much of the information pertaining to fire protection, with an emphasis on ventilation, in its Annex B in 2017. This was moved into the standard in the 2021 edition. Parts of this Annex B and what is now in NFPA 96 have nothing to do with ventilation, such as vehicle-mounted generators and LP-Gas systems.
   - The scope statement of NFPA 96 does not include anything about the use of LP-Gas or the installation requirements for LP-Gas systems.
   - Some parts of the LP-Gas system requirements in NFPA 96 are taken from NFPA 58, some from NFPA 1192, and some are not identifiable as to their source. This creates confusion when the rules are not consistent of when a different type of rule is stated, e.g., “Holes in the living area shall be sealed.” [Emphasis added, as “living area” is not a proper term for a commercial cooking location.]
   - NFPA 58, the Liquefied Petroleum Gas Code, is where requirements for LP-Gas systems are normally found.
   - Some parts of the LP-Gas system requirements in NFPA 96 do not match requirements in NFPA 58, thus creating a conflict in requirements and confusion for anyone installing the gas system in a food truck or trailer.
   - The Technical Committee on Liquefied Petroleum Gases appointed a working group to refine requirements for LP-Gas systems in mobile food facilities and work is well underway to add a new chapter pertaining to this for the next edition of NFPA 58. This working group showed an interest in establishing a separate standard for mobile food facilities, which include trucks, trailers, carts, and other mobile food-preparation facilities.

Thank you.

Richard Fredenburg

Please don’t print this unless you really need to!

Richard Fredenburg, LP-Gas Engineer
North Carolina Department of Agriculture and Consumer Services, Standards Division
Telephone 919-707-3231
Fax 919-715-0524

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.
Maynard, Mary

From: Taecker, John K. <John.K.Taecker@ul.com>
Sent: Friday, November 6, 2020 7:36 PM
To: stds_admin
Subject: Comments on New Project on Mobile Food Establishments/Mobile Cooking Operations

The following is in response to NFPA’s request for comments regarding the proposed new project to develop a standard for mobile food establishments/mobile cooking operations.

1. UL supports NFPA in developing a stand-alone standard that addresses all minimum fire and life safety provisions for mobile food establishments/mobile cooking operations.

2. Currently, the subject of fire safety for mobile cooking operations and establishments are addressed in NFPA 1 and NFPA 96. The focus of NFPA 96 is primarily for ventilation control and fire protection of commercial cooking operations, which has historically been known for fixed systems. While recently NFPA 96 has been revised to include mobile cooking operations, a dedicated standard for this subject would better facilitate and fully address all the requirements necessary for minimum fire and life safety. Mobile operations are somewhat different and invoke hazards that fixed systems do not incur. A standard dedicated to the unique application of mobile cooking operations provides the ability to fully address all the applicable fire and life safety considerations, rather than intermixing these requirements within the traditional fixed-in-place commercial cooking operations standard.

3. Yes, UL would be interested in participating as a member of the technical committee. If the Standards Council initiates development activities on this proposed project, UL staff plans to apply to serve on the Technical Committee.

Thank you for the opportunity to comment.

John K. Taecker
Senior Regulatory Engineer
Distinguished Member of Technical Staff
-----------------------------------------
UL LLC
981 Dry Creek Road
Campbell, CA  95008 USA
T:  510-319-4176
W: UL.com

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Hello,

My apologies for being tardy with this response, but please do accept it as the National Propane Gas Association represents about 2500 individuals and businesses that provide equipment and services to the propane industry in the U.S. and abroad.

Regarding the consideration of opening a new project on mobile food establishments, the National Propane Gas Association has not established a formal position, but as a member of NFPA technical committees, including the Technical Committee on Liquefied Petroleum Gases, my own opinion is that opening a project to address mobile food establishments would be a worthwhile endeavor.

NFPA 96 is currently the “lead” standard on food trucks and that group has put a lot of time and effort into refining its requirements for the safe operation of those vehicles. However, the technical committee does not appear to have expertise in all of the different systems that a mobile food establishment could include. For example, the fuel gas system can be either natural gas or propane and although the requirements for piping systems are similar, they are not identical. There is even more disparity between the requirements for propane containers and those used for compressed natural gas. The members of the NFPA 96 group may not have the technical background or knowledge to encompass these different systems.

I do plan on submitting an application to become a member of this technical committee in the event that the Standards Council decides to proceed with its formation.

Thank you for your consideration.

Bruce Swiecicki, P.E.
Senior Technical Advisor
Regulatory and Technical Services
NATIONAL PROPANE GAS ASSOCIATION

815.806.9035 TEL
708-209-6288 CELL
bswiecicki@npga.org
http://www.npga.org
Notes from Task Group on Scoping of Energy Storage System Committees / Documents

Meeting – 14Sep20 – 1300 to 1345 Boston Time

Attendees:

- Foisel, Jeff (Standards Council, Task Group Chair)
- Gallo, Ernie (70)
- Kasiski, Bob (75)
- Dahl, Dan (76)
- Layegh, Pouyan (110/111)
- Boone, Mark (850/853)
- Biggins, Jim (855)
- Roux, Dick (NFPA)
- Coache, Chris (NFPA)

Actions:

Review the following. Send comments, corrections, new thoughts to the whole group.

If there are specific sections that you are aware of in your documents that need to be updated to point to 855, or if there are specific additional requirements above 855, please send a Chris a note.

Update from Standard Council:

1) The council approved the change in scope of EPS-AAA to remove standby power as the task group requested.
2) The council recommended to add representation from 72 and 853 to the task group so these standards would be included in the scope for followup actions.
3) NFPA staff will prepare a document explaining the relationships between 855, 70, 72, 5, 76, 110, 111, 850, and 853. This will show the primary responsibility for 855 and the need to extract/reference it for ESS.
4) The definitions of ESS needs to be in one location without conflicts in different standards.
5) NFPA will identify specific text that needs to be corrected for the task group to review for the next council meeting (Dec).
6) The council did not form a correlating committee at this time, and will reconsider pending the outcome of the above.

Discussion of Task Group:

Definition of ESS –

The current definitions of ESS (Appendix) were discussed.

There are currently changes in progress from NFPA 72 to change the wording, remove the sections 3.3.99.1-3.3.99.4, and also to change the term from ESS to Stored-Energy.
Emergency Power Supply Systems (SEPSS). This effectively removes the conflicting definition from 72.

The definitions in 70 and 855 are very similar. The task group proposes:

**A consolidated definition to be housed in 855, and referenced to by other documents. The new definition would replace the current definition in 855 3.3.9 and read:**

*Energy Storage Systems (ESS)* - One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time.

- Annex (Informational Note No. 1): ESS(s) can include but is not limited to batteries, capacitors, and kinetic energy devices (e.g., flywheels). Energy storage systems can include inverters or converters to change voltage levels or to make a change between an ac or a dc system.

- Annex (Informational Note No. 2): These systems differ from other storage systems such as a UPS system, which is a power supply used to provide alternating current power to a load for some period of time in the event of a power failure.

This new definition removes the aspects of use and provides a simpler definition. The Annex information is provided for additional clarity.

**Updates to Existing Documents**

Chris will take the lead on identifying changes to 70, 72, 75, 76, 110, 111, 850, 853, and 855 to reflect the relationship with 855 as the primary source for reference/extract.

Chris will send these out for review of the task group by end of October.

**Next Meeting**

The plan is to review the proposed changes from Chris via email. If there are additional concerns where a discussion is needed, a meeting will be set in early November.
APPENDIX

Current Definitions of ESS

NFPA 855 defines Energy Storage Systems (ESS) as

- **3.3.9** Energy Storage Systems (ESS).
  
  One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time to the local power loads, to the utility grid, or for grid support.

NFPA 72 defines Energy Storage Systems (ESS) as:

- **3.3.99** Energy Storage Systems (ESS)
  
  Equipment that receives electrical energy and then provides a means to store that energy in some form for later use in order to supply electrical energy when needed. The energy storage system utilizes the technologies defined in 3.3.99.2 through 3.3.99.4.

  - **3.3.99.1** Chemical Energy Storage System.
    
    Consists of hydrogen storage, the hydrogen generator to supply the hydrogen for storage, and a fuel cell power system to provide electric energy upon demand.

  - **3.3.99.2** Electrochemical Energy Storage System.
    
    Consists of a secondary battery, electrochemical capacitor, flow battery, or hybrid battery-capacitor system that stores energy and any associated controls or devices that can provide electric energy upon demand.

  - **3.3.99.3** Mechanical Energy Storage System.
    
    Consists of a mechanical means to store energy such as through compressed air, pumped water or flywheel technologies, and associated controls and systems, which can be used to run an electric generator to provide electric energy upon demand.

  - **3.3.99.4** Thermal Energy Storage System.
    
    Consists of a system that uses heated fluids such as air as a means to store energy along with associated controls and systems, which can be used to run an electric generator to provide electrical energy upon demand.

NFPA 70 defines Energy Storage System (ESS) as:

- **(706.2)** Energy Storage Systems (ESS)
  
  One or more components assembled together capable of storing energy and providing electrical energy into the premises wiring system or an electric power production and distribution network.

  - Informational Note No. 1: ESS(s) can include but is not limited to batteries, capacitors, and kinetic energy devices (e.g., flywheels and compressed air). Energy storage systems can include inverters or converters to change voltage levels or to make a change between an ac or a dc system.
• Informational Note No. 2: These systems differ from other storage systems such as a UPS system, which is a power supply used to provide alternating current power to a load for some period of time in the event of a power failure.
ERRS Consolidation Plan Update

Back in April of 2019, the ERRS consolidation plan was presented to the standards council and approved which outlined a significant change to the way documents were grouped and revised within the ERRS division. The plan laid out a very detailed process for which all the documents that the ERRS team is responsible for and how they will be consolidated and grouped into 5 different revision groups.

As we look to move forward with finalizing the remaining groups (groups 3, 4, and 5) of the plan (annexes A, B, and C) we are requesting the standards council to approve the three remaining groups of the plan and the cycle changes that must be made to the documents that will fall into the remaining groups. The request for approval additionally seeks to align with the next cycle of NFPA 1006 with the ERRS 2026 Group (2027 editions). We are requesting that the three remaining groups be approved at the same time so as to remain transparent with our internal and external stakeholders but also to assist in aligning all the moving parts that must be coordinated in order to make this plan successful.

It is the hope that the standards council will rule favorably with the above requests to ensure the future success of the consolidation plan.

Respectfully Submitted,
Ken Holland
Senior Specialist
ERRS Division
1) Approve the creation of the consolidated documents in the following table and assign the new documents to the indicated consolidation group:

<table>
<thead>
<tr>
<th>Consolidation Group</th>
<th>New Doc #</th>
<th>New Draft Doc Title</th>
<th>Existing Doc #</th>
<th>Existing Doc Title</th>
</tr>
</thead>
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<tr>
<td>ERRS Group 3</td>
<td>1010</td>
<td>Standard for Fire Fighter; Fire Apparatus Driver/Operator; Airport Fire Fighter; Marine Fire Fighting for Land-Based Fire Fighters Professional Qualifications</td>
<td>1001</td>
<td>Standard for Fire Fighter Professional Qualifications</td>
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<td>1002</td>
<td>Standard for Fire Apparatus Driver/Operator Professional Qualifications</td>
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<td>1003</td>
<td>Standard for Airport Fire Fighter Professional Qualifications</td>
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<td>1005</td>
<td>Standard for Professional Qualifications for Marine Fire Fighting for Land-Based Fire Fighters</td>
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<td>1081</td>
<td>Standard for Facility Fire Brigade Member Professional Qualifications</td>
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<tr>
<td>1550</td>
<td>1521</td>
<td>Standard for Emergency Responders Safety</td>
<td>1500</td>
<td>Standard on Fire Department Occupational Safety, Health, and Wellness Program</td>
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<td>Standard on Emergency Services Incident Management System and Command Safety</td>
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<tr>
<td>1960</td>
<td>1963</td>
<td>Standard for Fire Hose Connections; Spray Nozzles; Manufacturer’s Design of Fire Department Ground Ladders; Fire Hose; Powered Rescue Tools</td>
<td>1964</td>
<td>Standard for Spray Nozzles and Appliances</td>
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