# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2021_26294 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| Runway | |
|---|---|

**Affected Taxiway/TDG**

**Design Aircraft (Each Runway/Taxiway)**

**AIP Grant Number**

**Passenger Charge Code (PFC)**

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | Lighting Installation | all | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

**EB Number**

--

| Title of Airport Engineering Brief | EB Published Date |
|---|---|
| | |

| Category | Materials |
|---|---|
| Sub Category | Lighting, L-100’s |

**1. Standard/Requirement**

Item L-108 Underground Power Cable for Airports

**2. Proposed**

See attachment

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

See attached MOS justification table

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

No deviation from 150/5370-10H

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Not applicable

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

Proposed modification of Item L-108 has no impact on Safety. Economy, Durability, and Workmanship, meet or exceed the requirements of 1502/5370-10H, facilitate administration of the construction contract, and/or reduces the risk of contractor claims.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson Jeffers | Standard Specifications Engineer | 07/08/2021 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 07/09/2021 |

## HEADQUARTERS

**Recommendation**

I recommend approval of the MOS based the submitted conditions.

| Full Name | Position | Date |
|---|---|---|
| Michael Meyers | Civil Engineer | 10/18/2021 |

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 10/18/2021 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 10/14/2021 | 1. Please save the document responding to my questions submitted 08/16/2021 (from the sponsor via Patrick Zettler) to the MOS record.<br>2. As the sponsor's own response concedes, new cable insulation typically tests in the Gig ohm range, new installed airfield cable insulation must test to a 150 meg ohm minimum.<br>3. If the grounding rods test at above 25 ohms, the Engineer of record may defer to the submitted table for guidance and acceptance.<br>4. The terms approved in MOS are specific and applicable to this project and its conditions only, and are not applicable to any other project. | Not required | Pat Zettler |

# L-108 MOS

| | |
|---|---|
| ***Project Name:*** | **ITEM L-108 UNDERGROUND POWER CABLE FOR AIRPORTS** |
| ***Project #:*** | |
| ***Design Reviewer:*** | |
| ***FAA Reviewer:*** | |
| ***Date:*** | 5/13/2021 (updated with responses, 8/12/21) |

| # | Section | MOS Description | MOS Justification | FAA Comments (8/10/21 Email-Marvin Woods) | DOT&PF Response to FAA Comments |
|---|---|---|---|---|---|
| 3 | 108-2.2 | Cable.<br>1. 1st para.: Removed last sentence<br>1.1. 2nd paragraph: Replaced, -"type THWN-2" with "type XHHW-2" and replaced "75°C" with "90°C".<br>2. 2nd paragraph: Added last sentence.<br>3. 3rd paragraph: Deleted.<br>**4. Added new 3rd paragraph**<br>5. Added new 4th paragraph<br>6. 5th para: Replaced "Contract Documents" with "Plans...Specifications"<br>7. Revised last sent. | 1. Removed conductor sizes from subsection in favor of referencing the plans.<br>1.1. Conductors with type XHHW-2 insulation are commonly specified and used in Alaska. This type of cross-linked PE thermoset insulation has historically performed very well, and has performed better than thermoplastic insulation, during cold ambient installation and operation. The "-2" suffix indicates that the insulation is rated to operate at a maximum temperature of 90°C (even though we typically determine the conductor's ampacity using the 75°C column of NEC 310.15(B)(16) due to the ampacity limitations of other system components at conductor termination points).<br>2. 2nd paragraph: Added last sentence for clarity (minor edit).<br>3. The specific requirements of this paragraph do not apply in Alaska. In most cases, the 60°C column of NEC 310.15(B)(16) is used to determine #14 through #1 AWG conductor ampacities, even if the conductors are rated 75°C or 90°C, due to the temperature limitations of components at the conductors' termination points. Reference NEC 110.14(C)(1). In Alaska, XHHW-2 insulation is typically used instead of THWN-2 insulation. The general requirements of this paragraph are already covered in the NEC, which is referenced in the first paragraph. The last sentence of this paragraph was retained (added to the end of the second paragraph).<br>**4. Added to identify and clarify requirements for underground electrical cable used to extend isolation transformer secondary leads.**<br>5. Added to identify requirements for telephone cable. Note: Recent experience has shown may not be posssible to find a copper shield and aluminum was approved by FAA as an alternate.<br>6. Replaced for consistency<br>7. Revised for consistency | **4. Can justification for the use of SOOW-A/SOOW cable be submitted?** | **4. Historically, 600V SOOW-A/SOOW hard service cords have been used as permitted by NEC 400.10(A)(2) and, in some cases, 400.10(A)(6). There is widespread usage in local industry installations of these hard service cords; since thay have performed well with few issues, they continue to be used.** |
| 13 | 108-2.13 | Interstice Filler. | Added new subsection to provide requirements for interstice filler where used. | **I do not have an objection to interstice filler, listed paragraph 2.13, being used for this project, but can it be used in the bid/design document and not in the MOS?** | **Removed paragraphs 2.13 & 3.2 (para 8).** |
| 15 | 108-3.2 | Installation in Duct Banks or Conduits.<br>1. 1st para.: revised 1st sent<br>2. 3rd para.: minor sent revision<br>3. 4th para: removed "Item"<br>4. 5th, 7th & 10th para: replaced "RPR" with "Engineer"<br>**5. 8th para.: Added new paragraph.** | 1, 2, 3, & 4. Revised for consistency.<br>**5. For 8th para: Paragraph added to provide additional clarity about L-823 connector installation requirements.** | **I do not have an objection to interstice filler, listed paragraph 2.13, being used for this project, but can it be used in the bid/design document and not in the MOS?** | **Removed paragraphs 2.13 & 3.2 (para 8), and removed previous MOS description and justification.** |

| | | | | | |
|---|---|---|---|---|---|
| 23 | 108-3.10 | Testing.<br>**1. Revised subsection e. and added Table 108-1.**<br>2. Deleted subsection f.<br>3. Revised subsection i, new "h", to require ground testing only at grounding electrode systems.<br>4. Added 3 new paragraphs before last paragraph for work involving existing circuits.<br>5. Revised last paragraph. | **1. Subsection e: Provides additional clarification regarding test conditions. Table 108-1 provide desired and minimum test results. Desired values are based on actual results from past projects. Minimum values are based on industry standard documents. For new installations, it is typical to get readings in the 1000's of megohms. The test results in this section have been increased at the request of state inspectors on past projects. The idea is that the higher values would be provided in the spec as a goal and if for some reason they weren't being met in the field, the engineer could review the values being achieved and allow a lower value if they were still acceptable values.**<br>2. Subsection f (per 10H): Insulation resistance values are covered in Table 108-1, which is added to subsection e.<br>3. Subsection i (new "h"): Ground testing is required at grounding electrode systems at structures, not at each individual ground rod on the airfield. Inserted the minimum impedance to ground and indicated that the impedance of the grounding electrode system (GES) is what is to be tested. The impedance of the installed GES is ultimately what is of concern; each individual grounding electrode is not typically tested stand-alone.<br>4. Paragraph relocated from 2.11 to more applicable location regarding testing. Revised to allow Engineer discretion in evaluating before and after test results based on the scope of changes made to the circuit. Added paragraphs to clarify the testing requirements for testing of new conductors that have been added to existing circuits.<br>5. Revised to clarify that only the materials causing the failed tests are required to be replaced. | **1. In Table 108-1 can the minimum insulation resistance fro 600V be 150 megaohms as opposed to 100 megaohms?** | **1. DOT&PF has no objection to updating that value from 100 MΩ to 150 MΩ. Typically, testing new insulated 600V conductors or cables, installed in conduit, will result in values greater than this so using 150 MΩ is acceptable. However, the note below Table 108-1 indicates that the minimums are taken from NETA ATS, which indicates 100 MΩ. The following 10H paragraph that was replaced the table also indicates 100 MΩ. Can the reviewer please provide the basis for increasing this value to 150 MΩ?** |

# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2021_27034 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| | |
|---|---|
| **Runway** | |
| **Affected Taxiway/TDG** | |
| **Design Aircraft (Each Runway/Taxiway)** | N/A, Applies to all ADOT airports, Statewide |
| **AIP Grant Number** | |
| **Passenger Charge Code (PFC)** | |

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | Lighting Installation (New) | new Item (New) | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

**EB Number**

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| Title of Airport Engineering Brief | EB Published Date |
|---|---|
| | |

| | |
|---|---|
| **Category** | Materials |
| **Sub Category** | Lighting, L-100's |

**1. Standard/Requirement**

None, No FAA standard

**2. Proposed**

See attachment

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

N/A, there is no FAA standard for these contractor provided services

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

None

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Are either required by State law or necessary for ADOT to administer the construction contract.

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

Proposed modification of Item L-130 has no impact on Safety. Economy, Durability, and Workmanship, meet or exceed the requirements of 1502/5370-10H, facilitate administration of the construction contract, and/or reduces the risk of contractor claims.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson Jeffers | Standard Specifications Engineer | 08/27/2021 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 08/31/2021 |

## HEADQUARTERS

**Recommendation**

I recommend approval of the MOS. No communication protocols or standards were identified in the application. If the control or communication equipment specified is internet addressable (web enabled), I also recommend the owner and or its agent develop or obtain cybersecurity options to minimize system vulnerability.

| Full Name | Position | Date |
|---|---|---|
| Michael Meyers | Civil Engineer | 10/07/2021 |

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 10/07/2021 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 09/30/2021 | Approval the MOS request does not imply FAA endorsement of the equipment specified. | Not required | Pat Zettler |

# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2021_27054 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| | |
|---|---|
| **Runway** | |
| **Affected Taxiway/TDG** | |
| **Design Aircraft (Each Runway/Taxiway)** | N/A, Applies to all ADOT airports, Statewide |
| **AIP Grant Number** | |
| **Passenger Charge Code (PFC)** | |

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | Lighting Installation (New) | new Item (New) | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

**EB Number**

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| Title of Airport Engineering Brief | EB Published Date |
|---|---|
| | |

| | |
|---|---|
| **Category** | Materials |
| **Sub Category** | Lighting, L-100's |

**1. Standard/Requirement**

None, No FAA standard

**2. Proposed**

See attachment

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

N/A, there is no FAA standard for these contractor provided services

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

None

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Are either required by State law or necessary for ADOT to administer the construction contract.

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

Proposed modification of Item L-132 has no impact on Safety. Economy, Durability, and Workmanship, meet or exceed the requirements of 1502/5370-10H, facilitate administration of the construction contract, and/or reduces the risk of contractor claims.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none.

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson Jeffers | Standard Specifications Engineer | 08/27/2021 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 08/31/2021 |

## HEADQUARTERS

**Recommendation**

I recommend approval of the MOS

| Full Name | Position | Date |
|---|---|---|
| Michael Meyers | Civil Engineer | 10/07/2021 |

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 10/07/2021 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 09/30/2021 | PAPIs shall meet the standards as described FAA Advisory Circular 150/5345-28H (Precision Approach Path Indicator systems) | Not required | |

# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2021_27094 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| | |
|---|---|
| **Runway** | |
| **Affected Taxiway/TDG** | |
| **Design Aircraft (Each Runway/Taxiway)** | N/A, Applies to all ADOT airports, Statewide |
| **AIP Grant Number** | |
| **Passenger Charge Code (PFC)** | |

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | Lighting Installation (New) | new Item (New) | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

| EB Number | |
|---|---|
| -- | |

| Title of Airport Engineering Brief | EB Published Date |
|---|---|

| | |
|---|---|
| **Category** | Materials |
| **Sub Category** | Lighting, L-100's |

**1. Standard/Requirement**

None, No FAA standard

**2. Proposed**

See attachment

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

N/A, there is no FAA standard for these contractor provided services

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

None

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Are either required by State law or necessary for ADOT to administer the construction contract.

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

Proposed modification of Item L-145 has no impact on Safety. Economy, Durability, and Workmanship, meet or exceed the requirements of 1502/5370-10H, facilitate administration of the construction contract, and/or reduces the risk of contractor claims.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson Jeffers | Standard Specifications Engineer | 08/27/2021 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 08/31/2021 |

## HEADQUARTERS

**Recommendation**

I recommend approval of the MOS

| Full Name | Position | Date |
|---|---|---|
| Michael Meyers | Civil Engineer | 10/08/2021 |

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 10/08/2021 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 09/30/2021 | Approval of this MOS request does not alter the performance requirements of the generator. | Not required | |

# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2021_27114 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| | |
|---|---|
| **Runway** | |
| **Affected Taxiway/TDG** | |
| **Design Aircraft (Each Runway/Taxiway)** | N/A, Applies to all ADOT airports, Statewide |
| **AIP Grant Number** | |
| **Passenger Charge Code (PFC)** | |

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | Lighting Installation (New) | new Item (New) | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

**EB Number**

--

| Title of Airport Engineering Brief | EB Published Date |
|---|---|

| | |
|---|---|
| **Category** | Materials |
| **Sub Category** | Lighting, L-100's |

**1. Standard/Requirement**

None, No FAA standard

**2. Proposed**

See attachment

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

N/A, there is no FAA standard for these contractor provided services

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

None

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Are either required by State law or necessary for ADOT to administer the construction contract.

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

Proposed modification of Item L-150 has no impact on Safety. Economy, Durability, and Workmanship, meet or exceed the requirements of 1502/5370-10H, facilitate administration of the construction contract, and/or reduces the risk of contractor claims.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none.

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson Jeffers | Standard Specifications Engineer | 08/27/2021 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2021

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 08/31/2021 |

## HEADQUARTERS

**Recommendation**

I recommend approval of the MOS

| Full Name | Position | Date |
|---|---|---|
| Michael Meyers | Civil Engineer | 10/04/2021 |

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 10/04/2021 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 09/30/2021 | Grounding requirements shall comply with the National Electric Code. | Not required | |

# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2021_27154 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| | |
|---|---|
| **Runway** | |
| **Affected Taxiway/TDG** | |
| **Design Aircraft (Each Runway/Taxiway)** | N/A, Applies to all ADOT airports, Statewide |
| **AIP Grant Number** | |
| **Passenger Charge Code (PFC)** | |

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | Lighting Installation (New) | new Item (New) | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

**EB Number**

--

| Title of Airport Engineering Brief | EB Published Date |
|---|---|

| | |
|---|---|
| **Category** | Materials |
| **Sub Category** | Lighting, L-100's |

**1. Standard/Requirement**

None, No FAA standard

**2. Proposed**

See attachment

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

N/A, there is no FAA standard for these contractor provided services

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

None

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Are either required by State law or necessary for ADOT to administer the construction contract.

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

Proposed modification of Item L-160 has no impact on Safety. Economy, Durability, and Workmanship, meet or exceed the requirements of 1502/5370-10H, facilitate administration of the construction contract, and/or reduces the risk of contractor claims.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none.

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson Jeffers | Standard Specifications Engineer | 08/27/2021 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 08/31/2021 |

## HEADQUARTERS

**Recommendation**

I recommend approval of the MOS

| Full Name | Position | Date |
|---|---|---|
| Michael Meyers | Civil Engineer | 10/04/2021 |

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 10/04/2021 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 09/30/2021 | Equipment shall be rated NEMA 3R or higher as needed | Not required | |

# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2021_27174 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| | |
|---|---|
| **Runway** | |
| **Affected Taxiway/TDG** | |
| **Design Aircraft (Each Runway/Taxiway)** | N/A, Applies to all ADOT airports, Statewide |
| **AIP Grant Number** | |
| **Passenger Charge Code (PFC)** | |

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | Lighting Installation (New) | new Item (New) | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

**EB Number**

--

| Title of Airport Engineering Brief | EB Published Date |
|---|---|

| | |
|---|---|
| **Category** | Materials |
| **Sub Category** | Lighting, L-100's |

**1. Standard/Requirement**

None, No FAA standard

**2. Proposed**

See attachment

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

N/A, there is no FAA standard for these contractor provided services

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

None

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Are either required by State law or necessary for ADOT to administer the construction contract.

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

Proposed modification of Item L-161 has no impact on Safety. Economy, Durability, and Workmanship, meet or exceed the requirements of 1502/5370-10H, facilitate administration of the construction contract, and/or reduces the risk of contractor claims.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson Jeffers | Standard Specifications Engineer | 08/27/2021 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 08/31/2021 |

## HEADQUARTERS

**Recommendation**

I recommend approval of the MOS

| Full Name | Position | Date |
|---|---|---|
| Michael Meyers | Civil Engineer | 10/04/2021 |

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 10/04/2021 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 09/30/2021 | Enclosures shall be rated NEMA 3R or higher as needed. | Not required | Pat Zettler |

# FAA ALASKA REGION
# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2018_05675(CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| | |
|---|---|
| **Runway** | |
| **Affected Taxiway/TDG** | |
| **Design Aircraft (Each Runway/Taxiway)** | N/A, Applies to all ADOT airports, Statewide |
| **AIP Grant Number** | |
| **Passenger Charge Code (PFC)** | |

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10G | Flexible Base Course | all | 1-3 |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standards for Specifying Construction of Airports | 07/21/2014 |

**EB Number**

--

| Title of Airport Engineering Brief | EB Published Date |
|---|---|
| N/A | |

| | |
|---|---|
| **Category** | Materials |
| **Sub Category** | Other |

**Standard/Requirement**

None, No FAA standard

**Proposed**

P-315 Emulsified Asphalt Base Course

See attachment

**Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

N/A, there is no FAA standard for emulsified asphalt treated base course

**Discuss Viable Alternatives (FAA ORDER 5300.1)**

None

**Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Necessary for ADOT to set the material requirements and administer the construction contract

**State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

In the absence of an FAA standard for this element, this specification provides a standard for the material, and construction requirements. The specification requirements are based on accepted engineering principles to provide a durable product to meet its intended purpose.

**Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson C Jeffers | Standard Specifications Engineer | 09/28/2018 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi A Warden | Acting Div Director | 10/03/2018 |

## HEADQUARTERS

**Recommendation**

See Notes.

| Full Name | Position | Date |
|---|---|---|
| Khalil Kodsi | Manager Airport Engineering Division | 10/16/2018 |

## POST APPROVAL

| Effective Start Date | Effective End Date | Post Implementation Complete Date |
|---|---|---|
| 10/16/2018 | 10/16/2023 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 10/16/2018 | Based on the purpose of this MOS as "Necessary for ADOT to set the material requirements and administer the construction contract" and “specification requirements based on accepted engineering principles to provide a durable product to meet its intended purpose”; Specification for Emulsified Asphalt Treated Base Course (ITEM P-315) is approved with conditions. | Not required | Pat Zettler |

| | | | |
|---|---|---|---|
| 10/16/2018 | 1) Use of ITEM P-315 is approved for use on airports/pavements serving airplanes 60,000 lbs or less | Not required | Pat Zettler |
| 10/16/2018 | 2) For each project used; the Geotech needs to establish strength of this material (modulus) and supporting layers below; and a FAARFIELD design with design life of 20 years is required, with User Defined (P-315) modulus being as determined by the geotech.<br>a.) On each project this specification is used, field verification that modulus exceeds that used in FARRFIELD Design, is required. | Not required | Pat Zettler |
| 10/16/2018 | 3) On each project this specification is used, document aggregate characteristics, aircraft use, test results for modulus, and any other data into a database (i.e. simple excel worksheets) which will assist to validate modulus consistently in varying conditions and design, and the specified requirements provide a base course which performs satisfactory for an acceptable time. | Not required | Pat Zettler |

# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2020_17134 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| | |
|---|---|
| **Runway** | |
| **Affected Taxiway/TDG** | |
| **Design Aircraft (Each Runway/Taxiway)** | N/A, Applies to all ADOT airports, Statewide |
| **AIP Grant Number** | |
| **Passenger Charge Code (PFC)** | |

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | Part 5 | All | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

**EB Number**

--

| Title of Airport Engineering Brief | EB Published Date |
|---|---|
| | |

| | |
|---|---|
| **Category** | Materials |
| **Sub Category** | Other |

**1. Standard/Requirement**

None, no FAA Spec for Foamed Asphalt Stabilized Base Course

**2. Proposed**

P-318 Foamed Asphalt Stabilized Base Course Updated Statewide MOS

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

There is no FAA standard for foamed asphalt stabilized base course. The specification requirements are based on accepted engineering principles to provide a durable product to meet its intended purpose. See attached spreadsheet for changes made. This supersedes ANC_2018_05674 and renames from P-310 to P-318.

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

None

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Not applicable

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

In the absence of an FAA standard for this element, this specification provides a standard for the material and construction requirements for foamed asphalt stabilized base course. The specification requirements are based on accepted engineering principles to provide a durable product to meet its intended purpose.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

None

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jenelle Brinkman | Project Manager | 04/28/2020 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 05/03/2020 |

## HEADQUARTERS

**Recommendation**

| Full Name | Position | Date |
|---|---|---|

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 05/03/2020 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 04/29/2020 | For each project used; the Geotech needs to establish strength of this material and supporting layers below; and a FAARFIELD design with design life of 20 years is required, with maximum User Defined (P-310) modulus of 100,000 psi. | Not required | Not required |
| 04/29/2020 | On each project this specification is used, document aggregate characteristics, aircraft use, test results for modulus when performed, and any other data into a database (i.e. simple excel worksheets) which will assist to validate modulus consistently exceeds 100,000 psi in varying conditions and design, and the specified requirements provide a base course which performs satisfactory for an acceptable time. | Not required | Not required |
| 04/29/2020 | Use of ITEM P-310 is approved for use on airports/pavements serving airplanes (ie critical aircraft) 60,000 lbs or less. | Not required | Not required |

# FAA ALASKA REGION

# MODIFICATION OF AIRPORT STANDARDS

## BACKGROUND ANC_2020_19394 (CONDITIONAL)

| Airport | Location (City, State) | LOC ID |
|---|---|---|
| ANC | ANCHORAGE, AK | PANC |

| Runway | |
|---|---|

| Affected Taxiway/TDG |
|---|

| Design Aircraft (Each Runway/Taxiway) |
|---|

| AIP Grant Number |
|---|

| Passenger Charge Code (PFC) |
|---|

## MODIFICATION OF STANDARDS

| AC Number | Chapter | Paragraph | Page Num |
|---|---|---|---|
| 150/5370-10H | P-608-R | all | |

| Title of Standard Being Modified (Cite Reference Document) | AC Published Date |
|---|---|
| Standard Specifications for Construction of Airports | 2018-12-21 |

| EB Number |
|---|
| -- |

| Title of Airport Engineering Brief | EB Published Date |
|---|---|

| Category | Materials |
|---|---|
| Sub Category | Miscellaneous, P-600’s |

**1. Standard/Requirement**

P-608-R Rapid Cure Seal Coat

**2. Proposed**

See attachment

**3. Explain Why Standard Cannot be Met (FAA ORDER 5300.1)**

See attached MOS justification table

**4. Discuss Viable Alternatives (FAA ORDER 5300.1)**

No deviation from 150/5370-10H

**5. Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)**

Not applicable

**6. State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1)**

Proposed modification of Item “P-608-R” has no impact on Safety. Economy, Durability, and Workmanship, meet or exceed the requirements of 1502/5370-10H, facilitate administration of the construction contract, and/or reduces the risk of contractor claims.

**7. Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards**

Not applicable, there are none

## SPONSOR

| Full Name | Position | Date |
|---|---|---|
| Jefferson Jeffers | Standard Specifications Engineer | 08/20/2020 |

## REGION

**Date of Latest FAA Signed ALP**

02/14/2017

**Recommendation**

Approval

| Full Name | Position | Date |
|---|---|---|
| Kristi Warden | Acting Div Director | 08/26/2020 |

## HEADQUARTERS

**Recommendation**

Recommend approval....with above condition.

| Full Name | Position | Date |
|---|---|---|
| Michael Meyers | Civil Engineer | 09/02/2020 |

## POST APPROVAL

| Effective Start Date | Post Implementation Complete Date |
|---|---|
| 09/02/2020 | |

## COORDINATION USERS

| Date | Name | Coordination level | Concur |
|---|---|---|---|

## CONDITIONS

| Date | Condition | ADO | RO |
|---|---|---|---|
| 08/31/2020 | Exercise caution when applying below 55, cure time is extended and surface may not meet friction requirements until fully cured. | Not required | Pat Zettler |