

APPENDIX C

LIST OF SYMBOLS

| Symbol | Description | Units, English |
|-----------------|--|-----------------|
| a | Regression constant | -- |
| a | Gutter depression | in. |
| A | Cross sectional area of flow | ft ² |
| A | Drainage area | acres |
| A | Sub-basin drainage area | mi ² |
| A _c | The most downstream part of the larger primary area that will contribute to the discharge during the time of concentration associated with the smaller, less pervious area | acres |
| A _g | Clear opening area of the grate | ft ² |
| A _k | Basin area | sq mi |
| A _s | Contributing drainage area | sq mi |
| A _w | Flow area in depressed gutter width | ft ² |
| A' _w | Gutter flow area in a width equal to the grate width | ft ² |
| A,B,C | Basin characteristics | -- |
| B | Bottom width of channel | ft |
| b, c, d | Regression coefficients | -- |
| C | Dimensionless runoff coefficient | -- |
| C _o | Orifice coefficient | -- |
| C _w | Weir coefficient | -- |
| CN | Curve number | -- |
| d | Depth of flow | ft |
| d | Average depth across the grate: $0.5 (d_1 + d_2)$, | ft |
| d | Depth at curb measured from the normal cross slope, $(d=T S_x)$ | ft |
| D | Culvert height or diameter | ft |
| d _B | Depth at point B of a V shaped gutter | ft |
| d _C | Depth at point C of a V shaped gutter | ft |
| d _c | Critical depth | ft |
| d _i | Depth at lip of curb opening | ft |
| d _o | Effective head on the center of the orifice throat | ft |

| Symbol | Description | Units, English |
|----------|--|-------------------------|
| d_2 | Depth at curb | -- |
| d_{50} | Average riprap size | ft |
| D_{50} | Average riprap size | ft |
| E | Inlet efficiency | percent |
| EGL_i | EGL at the inlet end | |
| EGL_o | EGL at the outlet end | |
| E_o | Ratio of flow in a chosen width (usually the width of a grate) to total gutter flow (Q_w/Q) | -- |
| E'_o | Adjusted frontal flow area ratio for grates in composite cross sections | -- |
| F | Froude number | -- |
| F_p | Adjustment factor for pond and swamp areas | -- |
| g | Acceleration due to gravity | 32.16 ft/s ² |
| G_i | Grade of roadway | percent |
| G_1 | Approach grade | percent |
| G_2 | Approach grade | percent |
| h | Height of curb-opening inlet or orifice | ft |
| h | Orifice throat width | ft |
| H | Head (above weir crest excluding velocity head) | ft |
| H_f | Friction loss | ft |
| h_o | Head measured as the distance from the culvert invert (flow line) at the outlet to the control elevation | ft |
| I | Rainfall intensity | in/hr |
| IA | Percent of basin occupied by impervious surfaces | percent |
| I_a | Initial abstraction | in |
| k | Intercept coefficient (Table 2-3) | -- |
| K | Vertical curve constant, rate of vertical curvatures | ft/ percent |
| K_c | Empirical coefficient equal to .933 | -- |
| K_e | Entrance loss coefficient | -- |
| L | Curb opening length | ft |
| L | Flow length | ft |
| L | Horizontal length of curve | ft |
| L | Actual culvert length | -- |
| L_T | Curb opening length required to intercept 100 percent of the gutter flow | ft |

| Symbol | Description | Units, English |
|--------|---|--|
| L_1 | Adjusted culvert length | -- |
| n | Hydraulic resistance variable | -- |
| n | Manning's roughness coefficient | -- |
| n_1 | Desired n value | -- |
| P | Depth of 24-hr precipitation | in |
| P | Perimeter of the grate disregarding the side against the curb | ft |
| q | Hydrograph ordinate for a specific time | ft ³ /s |
| Q | Flow | ft ³ /s |
| Q' | One half the total flow | -- |
| q_a | Adjusted peak flow | ft ³ /s |
| q_p | Peak flow | ft ³ /s |
| q_t | Tabular hydrograph unit discharge from appropriate table (SCS TR-55 manual) | ft ³ /s/mi ² /in |
| q_u | Unit peak flow | ft ³ /s/mi ² /in |
| Q_b | Bypass flow | ft ³ /s |
| Q_D | Depth of direct runoff | in |
| Q_i | Intercepted flow, interception flow capacity, inflow, flow capacity | ft ³ /s |
| Q_s | Flow capacity of the gutter section above the depressed section | ft ³ /s |
| Q_w | Flow rate in the depressed section of the gutter | ft ³ /s |
| R | Hydraulic radius (flow area divided by the wetted perimeter) | ft |
| RI_2 | Rainfall intensity for 2-hr, 2-yr recurrence | in/hr |
| RQ_T | T-year rural peak flow | ft ³ /s |
| R_f | Ratio of frontal flow intercepted to total frontal flow | -- |
| R_s | Ratio of side flow intercepted to total side flow | -- |
| S | Surface slope | ft/ft |
| SL | Main channel slope (measured between points that are 10 and 85 percent of the main channel length upstream of the site) | ft/mi |
| S_L | Longitudinal slope | ft/ft |
| ST | Basin storage (percentage of basin occupied by lakes, reservoirs, swamps, and wetlands) | percent |
| S_e | Equivalent cross slope | ft/ft |

| Symbol | Description | Units, English |
|-----------|---|--------------------|
| S_p | Slope | percent |
| S_R | Retention | in |
| S_w | Cross slope of the depressed gutter | ft/ft |
| S'_w | Cross slope of the gutter measured from the cross slope of the pavement, S_x | ft/ft |
| S_x | Cross slope | ft/ft |
| t | Time | -- |
| t_b | Time base | hr |
| t_c | Time of concentration | hr |
| t_{c1} | Time of concentration of the smaller, less pervious tributary area | hr |
| t_{c2} | Time of concentration associated with the larger primary area | hr |
| t_p | Time to peak | hr or s |
| T | Distance of the spread, width of flow (spread) | ft |
| T' | Hypothetical spread | ft |
| T' | One half the total spread | ft |
| T_a | Spread at the average velocity in a triangular gutter | ft |
| T_s | Width of spread from the junction of the gutter and the road to the limit of the spread | -- |
| T_{ti} | Travel time | min |
| T_{ti1} | Segment 1, sheet flow, travel time | min |
| T_{ti2} | Segment 2, shallow concentration flow, travel time | min |
| T_{ti3} | Segment 3, conduit flow, travel time | min |
| T_1 | Spread at the upstream end of the triangular gutter section | ft |
| T_2 | Spread at the downstream end of the triangular gutter section | ft |
| UQ_T | Urban peak discharge for T-year recurrence interval | ft ³ /s |
| V | Velocity, frontal flow efficiency | ft/s |
| V_a | Average velocity | ft |
| V_o | Gutter velocity where splash-over first occurs | ft/s |
| W | Width of gutter, width of grate | ft |
| x | Subscript designating values for incremental areas with consistent land cover | -- |
| X | Distance from sag point | -- |

| Symbol | Description | Units, English |
|----------------|---|----------------|
| y | Depth of water in the channel | -- |
| Y | Depth of ponding | -- |
| Y _f | Depth at the flanking inlet | -- |
| z | Horizontal distance of the side slope to a rise of 1 ft. vertical | ft |
| < | Less than | -- |
| ≤ | Equal to or less than | -- |
| > | Greater than | -- |
| ≥ | Equal to or greater than | -- |
| = | Equals | -- |
| % | Percent | -- |
| ° | Degree | -- |
| Φ | Diameter | -- |

APPENDIX D

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APPENDIX E

WAIVER PROCESSING PROCEDURES FOR DOD

E-1 ARMY

E-1.1 Waiver Procedures:

E-1.1.1 **Installation.** The installation's design agent, aviation representative (safety officer, operations officer, and/or air traffic and airspace [AT&A] officer) and DEH master planner will:

E-1.1.1.1 Jointly prepare/initiate waiver requests.

E-1.1.1.2 Submit requests through the installation to the major command (MACOM).

E-1.1.1.3 Maintain a complete record of all waivers requested and their disposition (approved or disapproved). A list of waivers to be requested and those approved for a project should also be included in the project design analysis prepared by the design agent, aviation representative, or DEH master planner.

E-1.1.2 The MACOM will:

E-1.1.2.1 Ensure that all required coordination has been accomplished.

E-1.1.2.2 Ensure that the type of waiver requested is clearly identified as either "Temporary" or "Permanent." "Permanent" waivers are required where no further mitigative actions are intended or necessary. "Temporary" waivers are for a specified period during which additional actions to mitigate the situation must be initiated to fully comply with criteria or to obtain a permanent waiver. Follow-up inspections will be necessary to ensure that mitigative actions proposed for each temporary waiver granted have been accomplished.

E-1.1.2.3 Review waiver requests and forward all viable requests to U. S. Army Aeronautical Services Agency (USAASA) for action. To expedite the waiver process, MACOMs are urged to simultaneously forward copies of the request to:

E-1.1.2.3.1 Commander, U. S. Army Aeronautical Services Agency (USAASA),
ATTN: ATAS-AI, 9325 Gunston Road, Suite N319, Fort Belvoir, VA 22060-5582.

E-1.1.2.3.2 Commander, U.S. Army Safety Center (USASC), ATTN: CSSC-SPC,
Bldg. 4905, 5th Ave., Fort Rucker, AL 36362-5363.

E-1.1.2.3.3 Commander, U. S. Army Aviation Center (USAAVNC), ATTN: ATZQ-ATC-
AT, Fort Rucker, AL 36362-5265.

E-1.1.2.3.4 Director, USACE Transportation Systems Center (TSMCX), ATTN:
CENWO-ED-TX, 215 N 17th St., Omaha, NE 68102.

E-1.1.3 **USAASA.** USAASA is responsible for coordinating these reviews for the waiver request:

E-1.1.3.1 Air traffic control assessment by USATCA.

E-1.1.3.2 Safety and risk assessment by USASC.

E-1.1.3.3 Technical engineering review by TSMCX.

E-1.1.3.4 From these reviews, USAASA formulates a consolidated position and makes the final determination on all waiver requests and is responsible for all waiver actions for Army operational airfield/airspace criteria.

E-1.2 **Contents of Waiver Requests.** Each request must contain this information:

E-1.2.1 Reference to the specific standard and/or criterion to be waived by publication, paragraph, and page.

E-1.2.2 Complete justification for noncompliance with the airfield/airspace criteria and/or design standards. Demonstrate that noncompliance will provide an acceptable level of safety, economics, durability, and quality for meeting the Army mission. This includes reference to special studies made to support the decision. Specific justification for waivers to criteria and allowances must be included:

E-1.2.2.1 When specific site conditions (physical and functional constraints) make compliance with existing criteria impractical and/or unsafe. Some examples are the need to provide hangar space for all aircraft because of recurring adverse weather conditions; the need to expand hangar space closer to and within the runway clearances due to lack of land; and maintaining fixed-wing Class A clearances when support of Class B fixed-wing aircraft operations are over 10 percent of the airfield operations.

E-1.2.2.2 When deviation(s) from criteria fall within a reasonable margin of safety and do not impair construction or long range facility requirements. An example is locating security fencing around and within established clearance areas.

E-1.2.2.3 When construction that does not conform to criteria is the only alternative to meet mission requirements. Evidence of analysis and efforts taken to follow criteria and standards must be documented and referenced.

E-1.2.3 The rationale for the waiver request, including specific impacts on the assigned mission, safety, and/or environment.

E-1.3 **Additional Requirements:**

E-1.3.1 **Operational Factors.** Include information on the existing and/or proposed operational factors used in the assessment:

E-1.3.1.1 Mission urgency.

E-1.3.1.2 All aircraft by type and operational characteristics.

E-1.3.1.3 Density of aircraft operations at each air operational facility.

E-1.3.1.4 Facility capability (visual flight rules [VFR] or instrument flight rules [IFR]).

E-1.3.1.5 Use of self-powered parking versus manual parking.

E-1.3.1.6 Safety of operations (risk management).

E-1.3.1.7 Existing navigational aids (NAVAIDS).

E-1.3.2 **Documentation.** Record all alternatives considered, their consequences, necessary mitigative efforts, and evidence of coordination.

E-2 **AIR FORCE**

E-2.1 **Waivers to Criteria and Standards.** Waivers to criteria and standards in this publication must be approved by the major command (MAJCOM) pavements engineer.

E-2.2 **Waiver Procedure.** The design agent or, if designed by the Air Force, the base pavements engineer, prepares a Request for Waiver for each project. The request must contain a complete listing of all deviations from criteria and standards, including justification. If the base civil engineer concurs, the request is forwarded to the MAJCOM pavements engineer for consideration.

E-3 **NAVY AND MARINE CORPS**

E-3.1 **Applicability:**

E-3.1.1 **Use of Criteria.** The criteria in this manual apply to Navy and Marine Corps aviation facilities located in the United States, its territories, trusts, and possessions. Where a Navy or Marine Corps aviation facility is a tenant on a civil airport, use these criteria to the extent practicable; otherwise, FAA criteria apply. Where a Navy or Marine Corps aviation facility is host to a civilian airport, these criteria will apply. Apply these standards to the extent practical at overseas locations where the Navy and Marine Corps have vested base rights. While the criteria in this manual are not intended for use in a theater-of-operations situation, they may be used as a guideline where prolonged use is anticipated and no other standard has been designated.

E-3.1.2 **Criteria at Existing Facilities.** The criteria will be used for planning new aviation facilities and new airfield pavements at existing aviation facilities (exception: primary surface width for Class B runways). Existing aviation facilities have been developed using previous standards that may not conform to the criteria herein. Safety clearances at existing aviation facilities need not be upgraded solely for the purpose of conforming to this criteria; however, at existing aviation facilities where few structures have been constructed in accordance with previous safety clearances, it may be feasible to apply the revised standards herein.

E-3.2 **Approval.** Approval from Headquarters Naval Facilities Engineering Command (NAVFACENGCOC) must be obtained prior to revising safety clearances at existing airfield pavements to conform with these new standards. NAVFACENGCOC will coordinate the approval with the Naval Air Systems Command and Chief of Naval Operations/Command Master Chief (CNO/CMC) as required.

E-3.3 **Obtaining a Waiver.** Once safety clearances have been established for an aviation facility, there may be occasions where it is not feasible to meet the designated standards. In these cases, a waiver must be obtained from the Naval Air Systems Command (NAVAIR). The waiver and its relation to the site approval process is defined in NAVFACINST 11010.44E, *Shore Facilities Planning Manual*.

E-3.4 **Exemptions from Waiver.** Certain navigational and operational aids usually are sited in violation of airspace safety clearances in order to operate effectively. The aids listed in paragraphs E-3.4.1 to E-3.4.8 are within this group and require no waiver from NAVAIR, provided they are sited in accordance with NAVFAC P-272, *Definitive Designs for Naval Shore Facilities*, and/or the NAVFAC Design Manuals (DM series):

E-3.4.1 Approach lighting systems.

E-3.4.2 Visual approach slope indicator (VASI) systems and precision approach path indicators (PAPI).

E-3.4.3 Permanent optical lighting systems (OLS), portable OLS, and Fresnel lens equipment.

E-3.4.4 Runway distance markers.

E-3.4.5 Arresting gear systems, including signs.

E-3.4.6 Taxiway guidance, holding, and orientation signs.

E-3.4.7 All beacons and obstruction lights.

E-3.4.8 Arming and de-arming pads.

APPENDIX F

WAIVER PROCESSING PROCEDURES FOR FAA

ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

5300.1F

6/30/00

SUBJ: MODIFICATIONS TO AGENCY AIRPORT DESIGN, CONSTRUCTION, AND
EQUIPMENT STANDARDS

1. PURPOSE. This Order establishes approval level for modifications to standards applicable to airport design, construction and equipment procurement projects.

2. DISTRIBUTION. This Order is distributed to division level in the Offices of Airport Planning and Programming, Airport Safety and Standards, Air Traffic, Airway Facilities, and Flight Standards Services; to the division level in the regional Airports, Air Traffic, Airway Facilities, and Flight Standards Divisions; and to all Airport District and Field Offices.

3. CANCELLATION. Order 5300.1E, *Approval Level for Modification of Agency Airport Design and Construction Standards*, dated 10/22/91, is canceled.

4. DEFINITIONS.

a. "Modification to standards" means any change to FAA standards, other than dimensional standards for runway safety areas, applicable to an airport design, construction, or equipment procurement project that results in lower costs, greater efficiency, or is necessary to accommodate an unusual local condition on a specific project, when adopted on a case-by-case basis.

b. Regional or State standards are alternative standards that may be used within the subject Region or State for airport development projects without further documentation.

c. "Materials standards" are those standards that apply to the procurement or approval of materials.

d. "Construction standards as they relate to materials" are those standards that apply to installation methods and tolerances.

5. EXEMPTIONS. Exemptions from 14 CFR Part 139, *Certification and Operations: Land Airports Serving Certain Air Carriers* (Part 139) are not covered by this Order.

6. BACKGROUND. Various laws and regulations require conformance with current FAA standards, as detailed below. Modifications to national standards may be considered for a specific project where unusual conditions preclude compliance with national airport design, construction, materials, or equipment standards.

a. Airport and Airway Improvement Act. The Airport and Airway Improvement Act (The Act), recodified at 49 USC 47105(b)(3) states in part, "An application for a project grant under this subchapter may propose airport development only if the development complies with standards the Secretary prescribes or approves, including standards for site location, airport layout, site preparation, paving, lighting, and safety of approaches."

b. Airport Improvement Program. To carry out the intent of the Act, one of the standard grant assurances requires airport sponsors to "...carry out the project in accordance with policies, standards, and specifications approved by the Secretary, including but not limited to, the advisory circulars listed in the Current FAA Advisory Circulars for AIP Projects, ... and in accordance with applicable state policies, standards, and specifications approved by the Secretary." In addition, Order 5100.38, *AIP Handbook*, paragraph 35, provides that "... a sponsor is required to comply with all appropriate technical guidelines incorporated into identified AC's; and these standards become mandatory for the project being funded. Standards in effect on the date of allocation of AIP funds to a project apply to that project. Standards which become effective after the date of allocation may be applied to the project by mutual agreement between the FAA and the sponsor."

c. Passenger Facility Charges. 14 CFR Part 158, *Passenger Facility Charges*, Appendix A requires, "The public agency hereby assures and certifies, with respect to this project that: ...It will carry out the project in accordance with FAA airport design, construction, and equipment standards and specifications contained in advisory circulars current on the date of project approval."

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d. Runway Safety Areas. Part 139, paragraph 139.309, requires runway safety areas to conform to current standards if construction, reconstruction, or significant expansion began on or after January 1, 1988 *to the extent practicable*. Regional Airports Division Managers are required to make a Runway Safety Area determination in accordance with FAA Order 5200.8, *Runway Safety Area Program*, for each runway at federally obligated airports and airports certificated under Part 139 within their geographic purview. Modifications to Standards are *not* issued for nonstandard runway safety areas.

7. POLICY. A standard policy for modifications to standards ensures uniformity in the application of standards.

a. Modifications to materials standards shall be made only when locally available materials cannot meet the requirements of that standard, and are subject to the limitations of paragraph 10.

b. Modifications to construction methods standards shall be made only when they will result in cost savings and/or greater efficiency, and are subject to the limitations of paragraph 10.

c. Modifications to equipment standards or airport design standards shall be made only when justified by unusual local conditions.

d. Modifications to the general provisions of AC 150/5370-10, *Standards for Specifying Construction of Airports*, should be made only to make them consistent with local laws and regulations.

8. REQUESTS FOR MODIFICATIONS TO STANDARDS. An airport sponsor's request for a modification to standards shall be submitted to the appropriate FAA Airports Regional or District Office, and shall contain the following:

a. A list of standards affected and the basis for the request as allowed in paragraph 7 above.

b. A description of the proposed modification.

c. A discussion of viable alternatives for accommodating the unusual conditions, and

d. Assurance that:

(1) modifications to materials, construction or equipment standards will provide a product that will meet FAA standards for acceptance and that the finished product

will perform for its intended design life, based on historical data, or

(2) modifications to airport design standards will provide an acceptable level of safety, and

(3) modification is necessary to conform to local laws and regulations (if applicable).

9. PROCESSING OF REQUESTS.

a. Each FAA Regional or Airports District Office will maintain a file of approved modifications to standards associated with each airport. The file will contain a log that identifies the standard affected and the action date. The file will also contain each request received, the documented evaluation of the request, and a copy of the letter of approval. A table listing nonstandard conditions, including modifications to layout or dimensional standards, should be incorporated into the ALP. This table should reflect the dates of approval letters and identify associated airspace review case numbers.

b. Requests will be evaluated by the receiving office to determine if a modification to standards is appropriate, and if so, the proper level of approval as determined under sections 10-13 of this order.

(1) Those requiring headquarters approval will be forwarded to the Director of Airport Safety and Standards, AAS-1, and shall include the following:

(a) A reference to the project and location.

(b) The rationale for using a new method or material, documentation to show successful use on construction projects, and a copy of the proposed specification.

(c) A recommendation by the Regional Office for approval or disapproval.

(d) Approval or disapproval of Regional requests will be forwarded by AAS-1 within 30 days of receipt.

(2) Information copies of modifications to standards approved at the regional level shall be provided to AAS-1.

(3) Notify AAS-1, in writing, when methods or materials contained in Engineering Briefs are used on a project.

c. Modifications which may impact existing or future aircraft operations, instrument flight procedures, navigational aids, or facilities associated with instrument

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procedures will be coordinated as necessary with the regional National Airspace System Implementation Center, and Flight Standards, Air Traffic, and Airways Facilities Divisions.

d. Each Headquarters Division will update a central database of modifications to standards. This database will be used to track trends that indicate needs for changes to national standards.

e. Approval Letters. Approval letters should contain the following for each modification:

- (1) reference to the standard modified,
- (2) a description of the approved modification,
- (3) the justification for the modification,
- (4) the effective period of the modification, if appropriate, and
- (5) a statement that the modification is subject to review if conditions originally justifying the modification change.

10. REGIONAL APPROVAL. Modifications listed below may be approved by Regional Division Managers. This authority may be redelegated.

a. Modifications to airport design and equipment standards, and construction standards as they relate to materials (except as provided in paragraph 11 below) may be approved on a case-by-case basis when the modification will provide an acceptable level of safety and provide an economically feasible alternative.

b. Modifications to construction methods and materials specifications previously approved by AAS-1 for use within a region may be approved on a case-by-case basis without further review by AAS-1. Those determined to be appropriate for national use will be issued by AAS-1 as an Engineering Brief and may also be approved on a case-by-case basis without further review by AAS-1.

c. Modifications to the general provisions of AC 150/5370-10 may be approved if necessary to make them consistent with local laws and regulations.

11. HEADQUARTERS APPROVAL. The Director of Airport Safety and Standards, AAS-1 (or designee), specifically reserves approval authority for modifications to standards in the following areas:

a. Standards for siting navigational or lighting aids that are common to the facilities and equipment program.

b. Standards for marking, lighting and signs on airport runways, taxiways and aprons.

c. Equipment specifications listed in AC 150/5345-53, *Airport Lighting Equipment Certification Program*.

d. Construction methods and materials specifications for which AAS-1 has not previously approved a modification for use within the subject Region.

e. Criteria used to control the quality or determine the acceptability of materials and finished products.

(1) Quality control criteria include all the tests performed to determine if adjustments to operations are necessary to stay within specification limits. They include the following: aggregate gradation within tolerance for subbase, base, and surface courses; asphalt content for bituminous mixes; and slump and air content for concrete mixes.

(2) Acceptance testing includes all criteria and the tests performed to determine acceptability of the material or finished product and includes the following: density and thickness for subgrade, subbase, base courses, and bituminous pavement; flexural strength and thickness for concrete pavement; surface tolerances for subbase, base, and surface courses and the use of a nuclear gauge for density acceptance in lieu of cores or borings.

f. Additions to requirements for Airport Layout Plans contained in Appendix 7 of AC 150/5300-13, *Airport Design*.

g. Standards for transfer of electronic data in Appendix 15 of AC 150/5300-13.

12. REGIONAL STANDARDS.

a. Alternative standards may be adopted by an FAA Regional Office as "regional standards." The authority to adopt such standards is the same as the authority to approve modifications to the affected standards on a case-by-case basis in paragraph 10 above.

b. Information copies of regional standards approved at the regional level will be provided to AAS-1, with a recommendation for adoption as national standards, if appropriate.

c. Requests for headquarters approval of regional standards must include adequate justification.

d. Regional standards must be updated when changes to national standards are issued.

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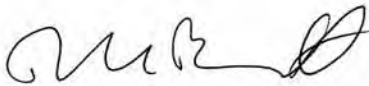
13. STATE STANDARDS.

a. State standards may be developed for airports that are not primary airports, in accordance with 49 USC 47105(c), and AC 150/5100-13A, *Development of State Standards for Nonprimary Airports*. State highway specifications may be permitted for airfield pavement construction at nonprimary airports in accordance with 49 USC 47114(d)(5) as amended by P.L. 106-181(April 2000). For all other airports, the FAA

standards shall be used, except as modified in accordance with this Order.

b. The Director of Airport Safety and Standards, AAS-1 (or designee), specifically reserves approval authority for State standards.

c. Standards developed under this section must be updated periodically and reflect FAA standards where applicable.



David L. Bennett
Director of Airport Safety and Standards

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