

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
AIRPORT IMPROVEMENT PROGRAM

MODIFICATION OF AIRPORT DESIGN STANDARDS

2013 - AAL-303 - NRA

BACKGROUND


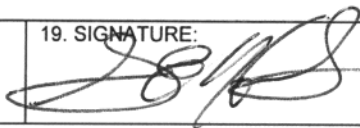
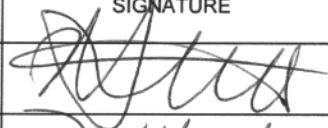


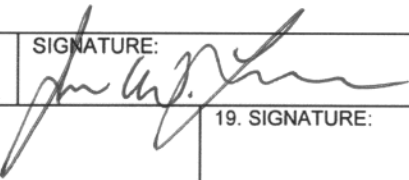
1. AIRPORT: All Airports in Alaska	2. LOCATION(CITY,STATE): Alaska	3. LOC ID:
4. EFFECTED RUNWAY/TAXIWAY: All Paved Runways and Taxiways	5. APPROACH (EACH RUNWAY): <input type="checkbox"/> PIR <input type="checkbox"/> NPI xx <input type="checkbox"/> xx VISUAL	6. AIRPORT REF. CODE (ARC): Any
7. DESIGN AIRCRAFT (EACH RUNWAY/TAXIWAY): Any		

MODIFICATION OF STANDARDS

8. TITLE OF STANDARD BEING MODIFIED (CITE REFERENCE DOCUMENT): Airport Design AC150/5300-13A.
9. STANDARD/REQUIREMENT: Notes 1 and 2 on Figure 3-23. Transverse grade limitations.
10. PROPOSED: Change Notes 1 and 2 (currently a requirement), to become a recommendation: Note 1. CONSTRUCTION OF A 1.5 IN [4cm] PAVEMENT EDGE DROP BETWEEN PAVED AND UNPAVED SURFACES IS RECOMMENDED. Note 2. A SLOPE OF -5.0 % GRADE FOR 10 FEET OF UNPAVED SURFACE ADJACENT TO THE PAVED SURFACE IS RECOMMENDED.
11. EXPLAIN WHY STANDARD CANNOT BE MET (FAA ORDER 5300.1F): Note 1: Maintaining 1.5 inch edge drop can be difficult for maintenance operations in certain situations. There is potential for pavement edge drop damage during grading and snow removal operations. Operators often use the pavement edge to "line up" for grading the gravel safety area. Furthermore, the 1.5" drop increases the probability that maintenance operations and uneven settlement of the gravel safety area near the pavement edge can result in compliance violations. Note 2: Maintaining several grades within the safety area is not desirable under certain circumstances. Grading equipment blades are typically 12 feet wide, resulting in the potential for compliance issues beyond the current 10 foot limit. During snow removal operations, if the operator is unaware of 5% slope adjacent to the pavement, movement of material between the two grades can occur resulting in compliance issues the in the safety area. Current standard for both notes were previously recommendations in the last version of Airport Design AC and provided flexibility based on specific site conditions and maintenance considerations.
12. DISCUSS VIABLE ALTERNATIVES (FAA ORDER 5300.1F): Removing the notes completely would remove the flexibility of applying the notes at airports where local conditions warranty their use.
13. STATE WHY MODIFICATION WOULD PROVIDE ACCEPTABLE LEVEL OF SAFETY, ECONOMY, DURABILITY, AND WORKMANSHIP (FAA ORDER 5300.1F): Changing the requirements of the notes to a recommendation allows a case by case evaluation based on input from the airport manager and gives the designer flexibility to implement one or both of these notes based on site conditions. Based upon history utilizing the transverse grade allowance under the previous version of the AC, making the requested change will not impact safety to air operations or workmanship of the development. Given the large amount of grading operations required in support of snow removal and the differential ground movement that we experience due to soils and permafrost common in Alaska; continuing with this transverse grade allowance will enhance maintenance operations and safety area compliance.
ATTACH ADDITIONAL SHEETS AS NECESSARY – INCLUDE SKETCH/PLAN

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MODIFICATION: Notes 1 and 2 on Figure 3-23 of AC 150/5300-13A.		LOCATION: Alaska		PAGE 2 OF 2	
14. SIGNATURE OF ORIGINATOR:  Wolfgang Jung, PE, CRAUDSCH		15. ORIGINATOR'S ORGANIZATION: DOT&PF		16. TELEPHONE: 907-269-0619	
17. DATE OF LATEST FAA SIGNED ALP: N/A					
18. ADO RECOMMENDATION: Unconditional Concur as proposed		19. SIGNATURE:  AAL-621		20. DATE: 7/30/13	
21. FAA DIVISIONAL REVIEW (ATO, FS): See attached review comments ASN: 2013-AAL-303-NRA					
ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR	
AAL-613		7/30/13	R		
AAL-604		7-30-13	DGW		
AAL 612		8/5/13	PLE		
COMMENTS:					
22. AIRPORTS' DIVISION ACTION: Concur as proposed.					
DATE: 8/5/2013		SIGNATURE: 		TITLE: Deputy Manager, AAL-600	
23. AAS-100 FINAL ACTION: N/A		19. SIGNATURE:		20. DATE:	
<input checked="" type="checkbox"/> UNCONDITIONAL APPROVAL		<input type="checkbox"/> CONDITIONAL APPROVAL		<input type="checkbox"/> DISAPPROVAL	
CONDITIONS:					

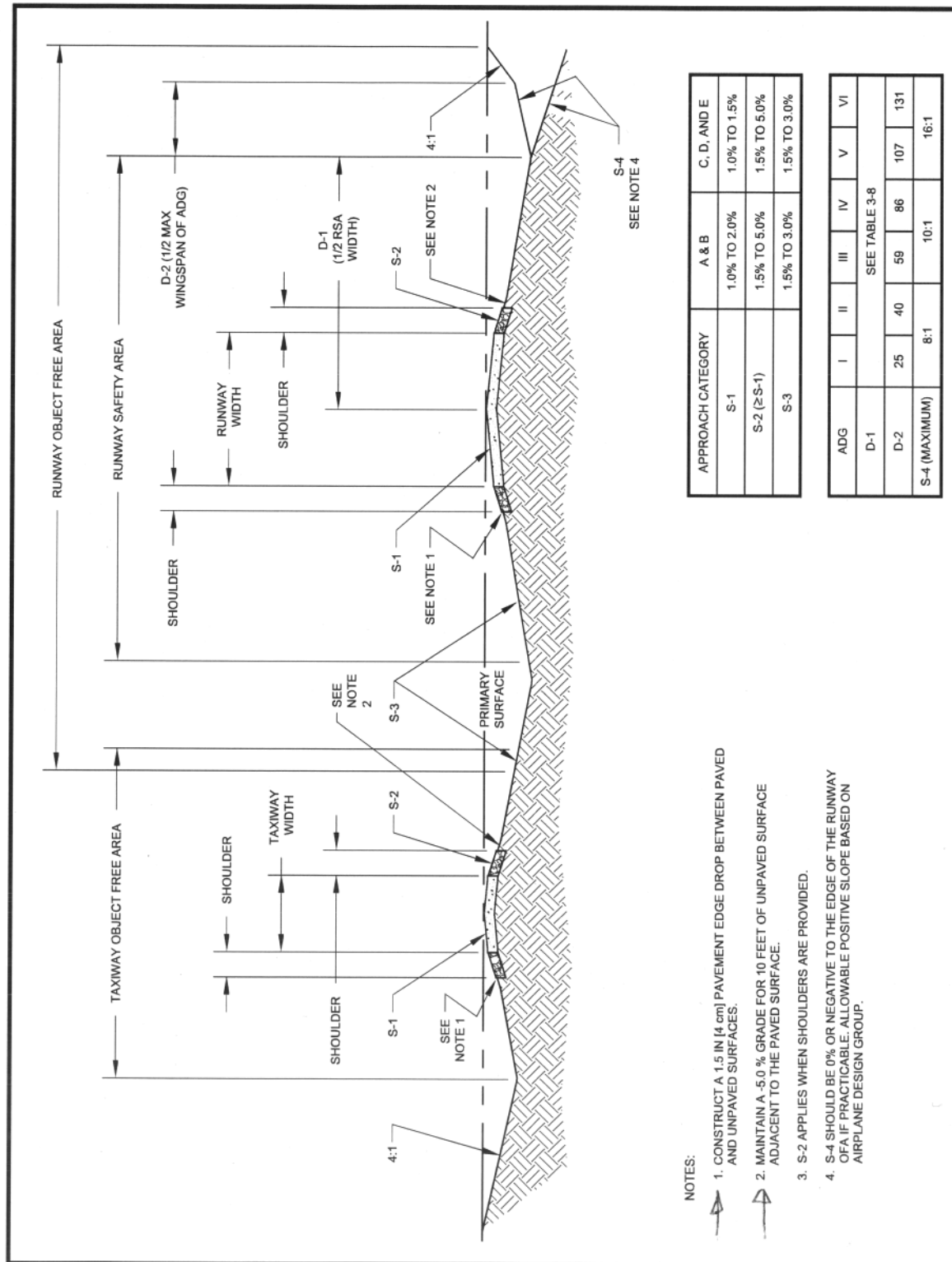


Figure 3-23. Transverse grade limitations