

Modifications to Standards

Presentation to: North and South Dakota Aviation Users

Name: Brian P. Schuck, BIS ADO Program Manager

Date: October 10 & 11, 2009



Federal Aviation
Administration



Modifications to Standards

- **There are two types of Modifications to Standards:**
 - Design
 - Construction



Modifications to Design Standards

- **Federally obligated airports are required to meet airport design standards.**
- **Some of the design standards include the Runway Safety Area, approaches, taxiway separations, and Object Free Areas.**
- **The sponsor must show that an acceptable level of safety is maintained.**



Modifications to Design Standards

- When it is not possible or reasonable to meet a design standard, but an acceptable level of safety can be obtained, then a modification to airport design standards can be requested.



Modifications to Design Standards

- Example:

Highway

Fence

OFA

RSA

OFA

Runway



Modifications to Design Standards

- Example:

The distance the largest wing extends into the OFA when the aircraft is at the edge of the RSA

Highway

Fence

OFA

RSA

OFA

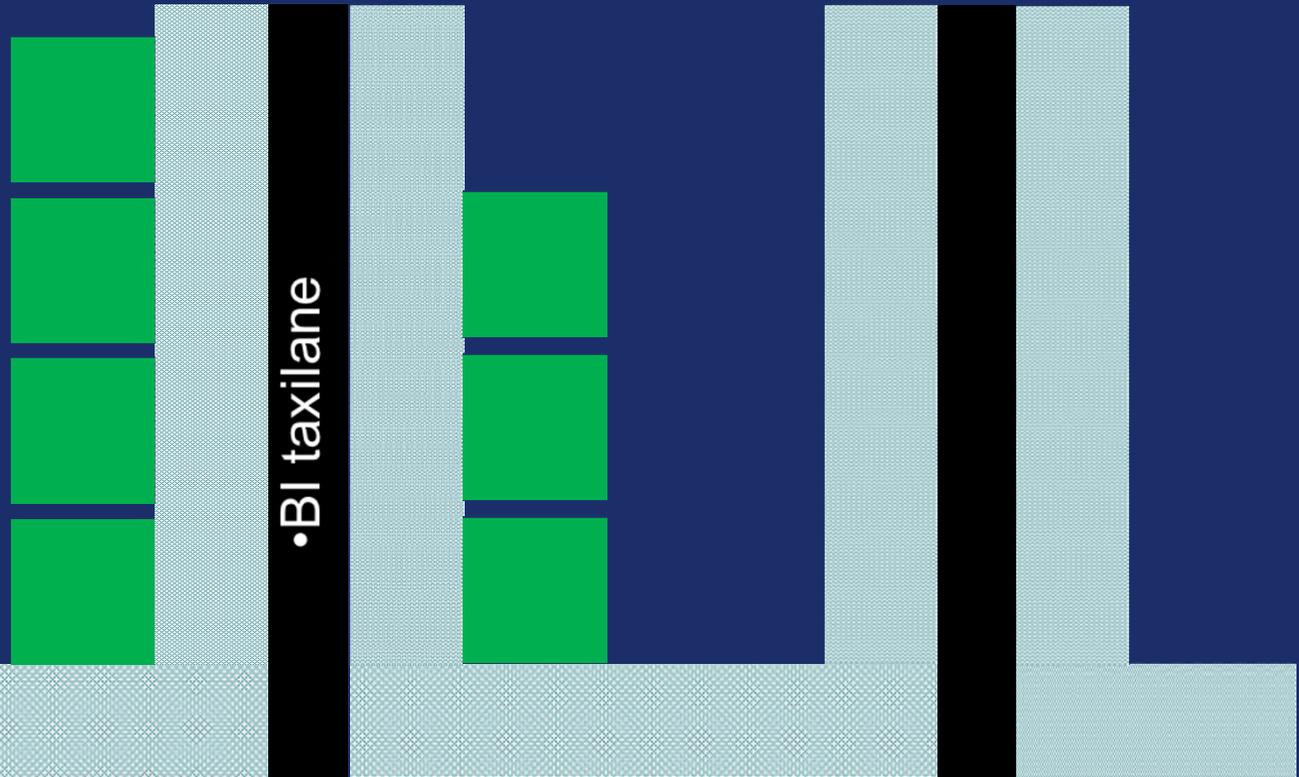
Runway



Modifications to Design Standards

Example for 52' Wingspan Aircraft

•Example



•BII Taxiway



Modifications to Design Standards

Example for 52' Wingspan Aircraft

79 ft

- Example

BI up to 49' wingspan

- 79' TOFA

BII up to 79' wingspan

- 115' TOFA

• BI taxilane



131ft

• BII Taxiway



Modifications to Design Standards

Example for 52' Wingspan Aircraft

79 ft

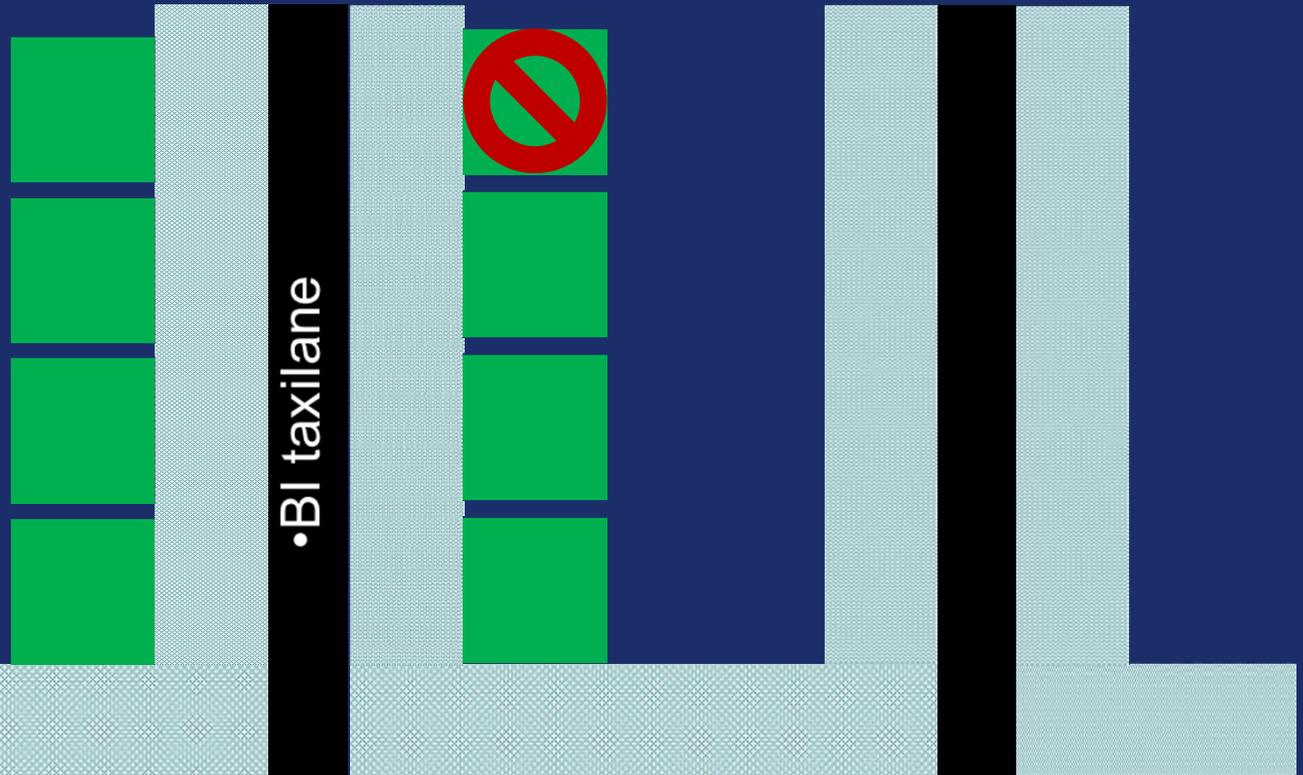
- Example

BI up to 49' wingspan

- 79' TOFA

BII up to 79' wingspan

- 115' TOFA



131 ft

• BII Taxiway



Modifications to Design Standards

Example for 52' Wingspan Aircraft

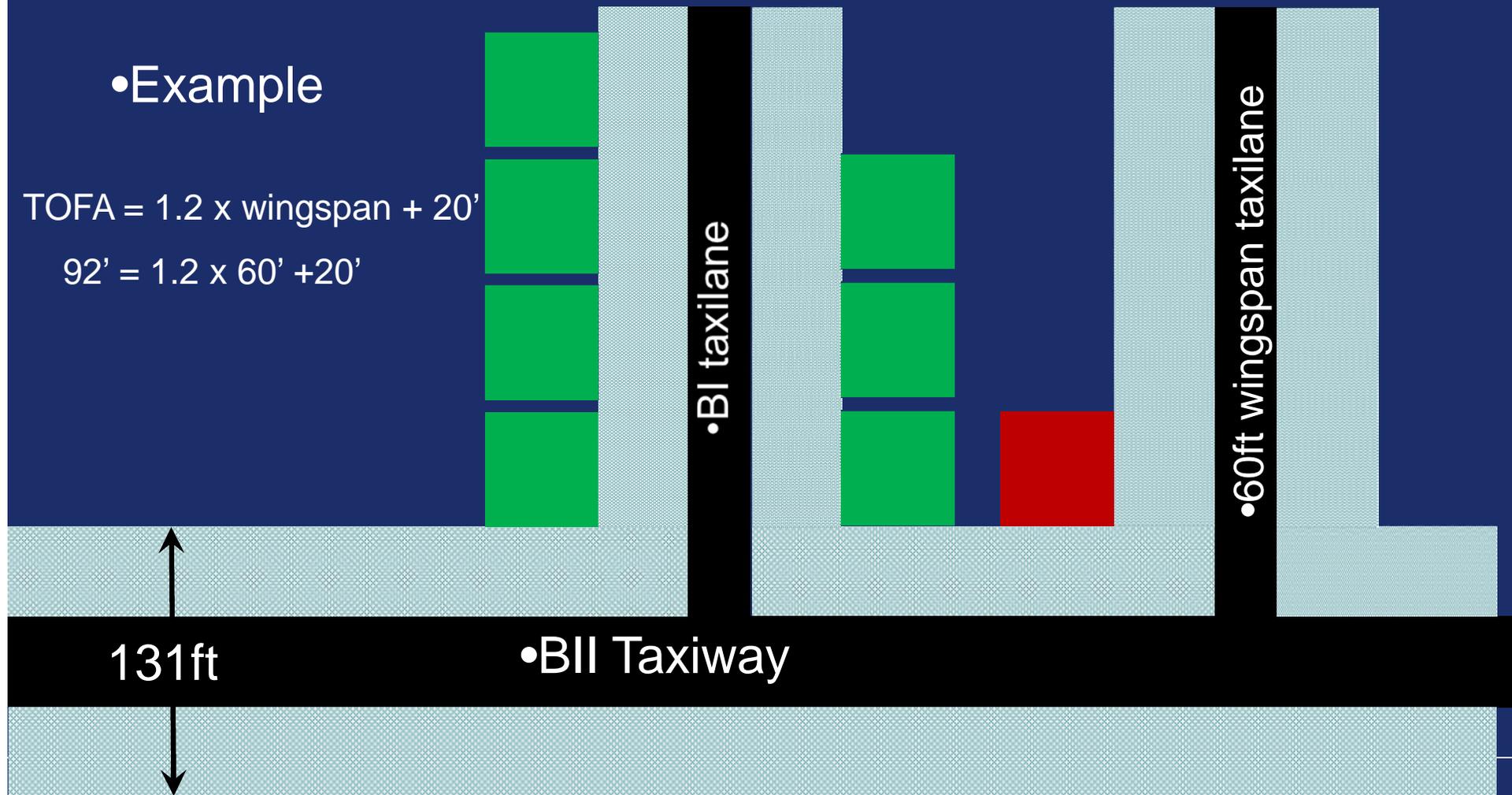
92 ft

79 ft

•Example

TOFA = 1.2 x wingspan + 20'

92' = 1.2 x 60' + 20'



Modification to **Construction** Standards

- **Construction standards are established to achieve standardization and positive and predictable results.**
- **Modifications are only allowable in unique circumstances where a clear need dictates them and will provide a product that will meet FAA acceptance criteria and the finished product will perform for its intended design life.**



Modification to Construction Standards – Rejuvenators



- **P-632 in Advisory Circular 150/5370-10D is a standard specification for rejuvenators.**
- **A modification to standards is not required when using a standard specification.**



Modification to Construction Standards – Fly Ash

- **FAA standards limit CaO content of flyash to 13%.**
- **North Dakota produced flyash exceeds this.**
- **A waiver was granted for CaO content up to 15%.**
- **Since CaO content varies from batch to batch, diligence with the quality control is necessary to prevent use of batches exceeding 15%.**



Modification to Construction Standards

- **To request a modification to construction standards, the sponsor must:**
 - List the standards requiring modification and discuss why the standard can not be met.
 - Describe the proposed modification.
 - Discuss viable alternatives for accommodating the unique conditions.
 - Provide documentation that the material will provide an acceptable level of safety and provide an economical and feasible alternative



Modification to Standards

- **Policy and Procedures Memorandum 5320.1G “General Processing of Modifications to Agency Airport Design and Construction Standards.**
- **Requests for modifications to standards must be submitted with AGL_MODIFICATIONS TO STANDARDS request form.**
- **http://www.faa.gov/airports/great_lakes/engineering**



Modification to Standards

- **Requests for Modifications to Construction Standards will not be approved after construction has occurred.**



Modification to Standards

Questions?

