



# **Modification of Guidance on Use of Airfield Pavement Markings**

Briefing for the  
House Armed Services Committee  
Pursuant to House Report 114–537, page 378



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# Congressional Requirement

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House Report 114–537, page 378 requests the Secretary of Defense to provide a briefing:

“...that details the full extent of actions taken to modify specifications, technical letters, and other Department guidance on airfield markings; the remaining actions to be taken to update additional Secretary of Defense guidance; and the outline of the Department’s methodology to ensure that determination of the category of retro-reflective beads used on airfields is determined on an installation-by-installation basis, based on local conditions and the life-cycle maintenance costs of the pavement markings.”



# Actions Taken to Modify Guidance

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- June 2016: Air Force revised its technical guidance (ETL 97-18) to explicitly allow use of Type III beads
- August 2016:
  - DoD revised its Unified Facilities Guide Specification for airfield markings (UFGS 32 17 23) to include Type III beads and requirement for life cycle cost analysis
  - Air Force rescinded ETL 97-18 and ETL 04-02
  - DoD rescinded UFGS 32 17 24



# Remaining Actions

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- December 2016 (planned): Publish guidance in the form of a life cycle cost analysis (LCCA) template and methodology for bead selection on installation-specific basis
- Late 2017 (planned): Evaluate application of guidance and selection decisions with commands
- 2019 (planned): Obtain more comprehensive performance data for Type I and Type III glass beads from FAA-sponsored study, and revise LCCA template as warranted



# Outline of Installation-level Methodology

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The life-cycle cost analysis template will:

- Provide universal parameters for expected bead service life based on durability and reflectivity
  - Assumptions necessary until FAA study is completed
- Allow installation-provided input for:
  - Local costs for installed markings using Type I and III beads
  - Frequency of restriping due to snowplowing, rubber removal, and other causes
- Differentiate between types of pavement markings (e.g., centerlines, stop lines) and evaluate best solution for each



# BACK-UP

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# Background

| Source                                  | Requirement  | DoD Response  |
|---|--|---|
| H. Rpt. 113-102<br>(May 2013)           | Prepare a business case analysis for continuing to specify both Type I and Type III glass beads  | (March 2014) Provided simplified life-cycle cost analysis with conclusion that Type I beads are sufficient and most cost-effective solution.                      |
| H. Rpt. 113-446<br>(May 2014)           | Assess report from Sightline LLC on type III glass beads, and assess value associated with incorporating Type III beads into specifications                | (March 2015) Provided detailed life-cycle cost analysis incorporating Sightline report information and assessment of its findings. Validated previous conclusion. |
| FY 2016 NDAA<br>sec. 2851<br>(Dec 2015) | Modify specifications to allow Type III glass beads, and develop policy to ensure selection is on installation-specific basis considering life-cycle costs | (expected during 2016) Modified specifications to allow Type III beads, and guidance to implement its use.  |