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FOR INFORMATION, CONTACT CERTIFICATION BRANCH, AAS-310 267.3085

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TO: AIRPORT CERTIFICATION PROGRAM INSPECTORS
TOPIC: RUNWAY AND TAXIWAY PAINTING

With the arrival of spring and good weather we want to review some of the types of paints which have been approved by the FAA for the painting of numbers, markings and stripes on the surface of airport runways, taxiways, and aprons.

AC 150/5370-10, Item P-620, RUNWAY AND TAXIWAY PAINTING (latest version), contains information on FAA standards for paints used at airports. Four types of paints are specified: Water base, solvent base, epoxy, and methacrylate. All paints must meet Federal Standard 595 for paint color. The water and solvent based paints must meet the current Federal Specifications (TT-P-85, TT-P-110, TT-P-1952D) for paint. The material requirements for epoxy and methacrylate based paints are contained in Item P-620. Epoxy and methacrylate based paints are more durable than water or solvent based paints but they are more expensive.

All four types of paints require the use of glass beads or sand to improve their friction characteristics. Glass beads not only improve friction characteristics but also improve conspicuity. They are required for all paint types when Federal funds are used for markings. Either airport grade or highway grade beads are acceptable. Silica sand can also be added to improve friction characteristics.

The FAA recommends that airports with nighttime operations use the paint and glass beads specified in the AC. At a minimum, the following areas should have paint with glass beads to improve conspicuity and friction characteristics:

1. All runway and taxiway holding position markings
2. Runway threshold marking

3. Runway threshold marking bar
4. Runway aiming point marking
5. Runway designation marking
6. Runway touchdown zone markings
7. Runway centerline
8. Taxiway centerline
9. Geographical position marking
10. Surface painted signs

The contrast of markings on light colored pavement can be increased by outlining them with a black border at least 6 inches in width. This is a particularly effective means of highlighting holding position markings and taxiway centerlines.

AC 150/5370-10, Standards for Specifying Construction of Airports, is available through the internet at : <http://www.faa.gov>. Click "Airports," click "Advisory Circulars," scroll down to the AC and click on it.

The FAA has no standard specification for thermoplastic paint. If this material is proposed for use on an AIP funded project, the design engineer must obtain approval through a modification to standards at the design stage of the project. Requests are evaluated on a case-by-case basis. Factors such as location, surface type, airport size, safety, and economy are taken into account in the decision to approve the modification. This material has been used on airports, with varying degrees of success. The FAA does not have enough data to develop a standard for this product. However, if an airport intends to use this type of product caution must be exercised with the application. It can be slick and some texturing material, such as glass beads or sand is needed to improve its friction characteristics.

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April 7, 1998

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Date

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