"Bonifibers" Polyester Modified Pavement

REFERENCE: Report 87-3, Jan. 1987; Update U87-12, Nov. 1987

HISTORY:

In 1984 approximately 1000 tons of pavement modified with "Bonifibers B", a polyester fiber, were produced and placed on Route US 2 as part of the Berlin-Barre-East Montpelier FO28-3(23)S paving project. The production, application and early performance of this project were reported in detail in Initial Report 87-3. Interim performance was reported in Update U87-12. Reflective cracking in April 1987, averaged 48% in the standard mix and 25% in the modified mix. Other than the addition of the Bonifibers and necessary additional asphalt, the two mixes were the same and only slight differences were noted in the rutting measurements.

STATUS:

Crack surveys were repeated in May of 1988 and 1989. Both counts showed that reflective cracking in the standard mix continued to exceed that in the modified mix. Rutting measurements averaged 1/16" in the wheeltracks of both mixes. The graph at right demonstrates the overall performance of the two mixes.

SUMMARY:

To date the Bonifiber modified pavement has far outperformed the standard mix in reflective crack prevention. The pavements will remain under evaluation to determine long term effectiveness and life cycle cost.