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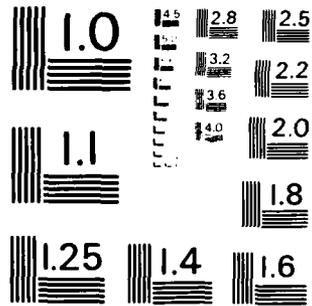
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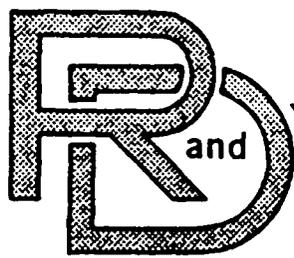
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TECHNICAL REPORT

NO. 13012

RUBBER COMPOUND DEVELOPMENT
FOR IMPROVED MILITARY
TANK TRACK
PHASE II
AUGUST, 1984



Contract DAAE07-83-C-R019

The Goodyear Tire & Rubber Co
P.O. Box 288
by St Marys, Ohio 45885

Project Engineer: Joe Fix
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U.S. ARMY TANK-AUTOMOTIVE COMMAND
RESEARCH AND DEVELOPMENT CENTER
Warren, Michigan 48090

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1.0. INTRODUCTION

This report, prepared by The Goodyear Tire and Rubber Co under CLIN 0002 of Contract DAAE07-83-C-R019, summarizes the preparation of T-156 shoe assemblies and T-142 pads made from the experimental compound 17CD737, which was developed under CLIN 0001 of the contract.¹

2.0. OBJECTIVE

The objective of this work was to supply rubberized T-142 pads and assembled T-156 rolls made with experimental compound for use in field testing.

3.0. CONCLUSION

Fifty T-142 track pads and one vehicle set of T-156 track (six rolls of 26 shoe assemblies each) were prepared using compound 17CD737. This compound was developed under Phase 1 of the contract.

4.0. RECOMMENDATION

The pads and shoe assemblies delivered under this contract should be field tested to determine relative life of compound 17CD737 compared to standard tank track compounds.

5.0. DISCUSSION

5.1. Background

Under Phase 1 of this contract, six experimental compounds were developed as possible improvements compared to current compounds used for track. Ten T-156 blocks made from each experimental were submitted to TACOM for analysis. From these six compounds, 17CD737 was chosen as the best candidate for field testing.

5.2. Fabrication

Using compound 17CD737, fifty T-142 track pads and one vehicle set of T-156 track shoe assemblies were fabricated. The rubber processed well using rubber mixing and curing equipment normally used for tank track compounds.

The T-156 blocks were assembled into six rolls of 26 shoe assemblies each. The bushings used in the assemblies were rubberized with QPL compound SM7541.

¹ Hoying, Michael B., TACOM Technical Report No 12950, "Rubber Compound Development for Improved Military Tank Track", Phase 1, The Goodyear Tire and Rubber Co, St Marys, OH 1984.

5.3. Shipping

The 50 T-142 pads were shipped to:

Commander
Yuma Proving Ground
Attn: STEYP-RPT
Yuma, AZ 85364

The six rolls of T-156 track (26 shoe assemblies each) were sent to:

Commander
Aberdeen Proving Ground
Attn: DRSTA-A-TLO
Aberdeen Proving Ground, MD 21005

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