

## REPORT



### A - Materiel (Con'td)

could efficiently maintain; showing that in general the two types should not be mixed for transport work.

The Militor, equipped with power winch and spade in rear, did wonderful work in pulling vehicles out of holes, sand pits, etc. The 5-ton tractor was also very efficiently used for this purpose. On one occasion at least, the Militor came into camp at night towing four trucks, showing that its power plant was almost perfect.

In the lighter types, very little difficulty was encountered. The only Packard trucks on the trip were three of the 1½ ton type. Mechanical difficulties in these were so few as to be negligible. A burned out wheel bearing, repaired at Garden City, was caused by an error in placing same when tires had been changed at Salt Lake City. These trucks surmounted the stiffest grades with motors running quietly and easily, and trucks in good condition. One Packard truck was badly overloaded during the entire trip. Its load was partially distributed in latter part, but when weighed near end of trip, its gross weight was still 1,500 pounds in excess of that of any other type of 1½ ton truck. The performance of these three trucks is considered remarkable.

The White 1½ ton trucks were also very good, and difficulties encountered with them were trifling. This also applies to G. M. C. type.

Among the touring and observation cars very little difficulty was encountered. One Cadillac touring car required a timing chain, and in the mountains carburettors needed adjusting.

One White observation car (truck chassis) had frequent difficulty of a minor nature, due to stoppages in oil line. The same car burned out a wheel bearing and lost a rear wheel in Wyoming, necessitating the replacing of the whole rear end.

Kitchen trailers were of the two and four wheel type. The only one to finish the trip was one of the two wheel type (Liberty). The trail-mobiles, four wheel type, were constantly in trouble. Officers of M.T.C. maintained that these troubles were the result of improper trailer connections; proper ones not being provided. In my opinion neither type is suitable for transport work, and a better one must be devised.

Motorcycles had much trouble after getting in the sandy districts. Except for scouting purposes, it is believed a small Ford roadster would be better suited to convoy work than motorcycle and side car.

As tires, the Giant solids gave better service than duals, and pneumatics were very successful. The Giant pneumatic is practically puncture-proof, admits of more speed than the solid, and prevents excessive vibration due to rough roads, etc.

The lessons drawn from observation of materiel are that the heavy area type is entirely unsuited for front transit work. A smaller type, not exceeding 2 tons, mounted on either solids or pneumatic tires, is essential.