

How space technology brought MoPac's costs down to earth.

While spending more than \$1 billion to modernize every part of its system, Missouri Pacific sought a method to further improve service, control costs and use equipment more efficiently. It has found the answer through development of its space-age Transportation Control System.





Top: CTC dispatching center in North Little Rock.

Total customer service was their goal.

MoPac set out to offer more services than any other single railroad. Seventeen all together. Including piggyback, containerization, trucking, Scatback small-shipment service, warehousing, unit trains, air and ocean freight.

Promising these services was simple enough. Delivering them efficiently and economically was harder.

Total system control was their method.

MoPac developed the new Transportation Control System (TCS) to do the job. Only the Apollo Space Program uses a more sophisticated computer control system. TCS gives MoPac some of the most efficient freight routes in the world. TCS computers monitor train performance, provide advance work orders for train crewmen and produce waybills. And keep continuous inventory of all cars en route or at customer points—for better distribution of loaded and empty cars. They even set performance norms for each route.

Bypassing bottlenecks was the benefit.

The system lets MoPac customers transact all normal business with a single phone call through Customer Service Centers.

Even the most automated switching yards slow freight traffic. TCS provides a means by which trains can be routed around busy yards. Any switching necessary can be made at sidings along the way. With tight, centralized scheduling, there's no confusion about which car goes where.

And that's where GM power comes in.

At any given moment, 97% of MoPac's locomotive fleet is working. During 1973 alone, locomotive unit miles grew by five million without any significant increase in fleet size. With TCS fully operational, this work load on available motive power will certainly get heavier. That makes locomotive availability a critical element in the system's success. *continued*



Little Rock repair shops perform preventive maintenance on up to 100 locomotives a day.



Over 10 billion ton-miles during 1974 made MoPac the world's largest chemical carrier.

Right: Freight pulls out of Dallas on the way to Mexican border crossing at Laredo. Three GP38-2's lead the way.



SOUTHLAND LIFE

889 889



SD40-2 consist hauls Piggyback Special freight north from New Orleans.

GM locomotives from EMD have proven they can stand the pace. Our Dash-Two Series locomotives introduced in 1972 perform even better than their already-reliable predecessors. That's why most of the 400 locomotives purchased by MoPac in the past five years come from EMD. And why GM power makes up 95% of MoPac's 1100-locomotive fleet.

A lot of hard work paid off.

Just look at the results. Total ton-miles grew 40% between 1970 and the end of 1974. And total revenues grew more than 60%. Yet the number of locomotives stayed almost the same, growing just over 5%.



All systems go on the Missouri Pacific!



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