

Peter J. Wong Project 6364-4 January 5, 1979 Informal Note #43

Sand Contraction

SOME CONVERSATIONS WITH CR AND UP ABOUT TERMINAL COMPUTERS

This note documents two conversations I had with CONRAIL and Union Pacific personnel concerning their philosophy on terminal computers. The "channels" have been set up for more extensive discussions at a later date.

CONRAIL

On November 29, 1978, I met with Mike Sims (VP for Data Systems) and Sel Orlando (Director of Business Systems) to discuss terminal computers. The following points were made:

- (1) The operating philosophy of a railroad dictates the organization of the data system. For example, because SP wants strong central control, it is only natural that their yard MIS capability resides at headquarters with teleprocessing to "slave" terminals in the field.
- (2) CONRAIL is in the process of designing a yard MIS capability for its yards; currently this capability is manual.
- (3) CONRAIL will essentially keep two yard inventory files; one at the yard and one at headquarters. The file structure of the inventory kept at the yard will be optimized to present a track-list, whereas the inventory at headquarters will be optimized to search for a car. It is CONRAIL's claim that yard personnel mainly want a track list, and that requests for the location of a car come from outside the yard. CONRAIL agreed that this was at variance with the MOPAC design.

Union Pacific

On December 8, 1978, I met with Don Hatcher (Manager, Yard Control Systems) to discuss terminal computers. The following points were made:

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- (1) At UP the operating department is the major influence on railroad policy. Consequently, data systems are subservient to the needs of running the railroad. For this reason, UP has gone the expensive route of having all yard MIS computers backed up by a fully capable "hot-spare." Note, this is a different policy that at MOPAC (see Ref. 1).
- (2) The file structure adopted by UP is very similar to that of MOPAC. I believe the main difference is that the TIF file (see Ref. 1) not only stores a pointer to the CRF file, but also the Car ID. Whereas MOPAC moves a car in inventory by identifying the "track sequence number," this modification allows UP to move cars by specifying the track and the Car ID.

* Ref. 1: Informal Note 34, "Missouri Pacific's Yard Computer Systems: Brief Observations," August 15, 1978.