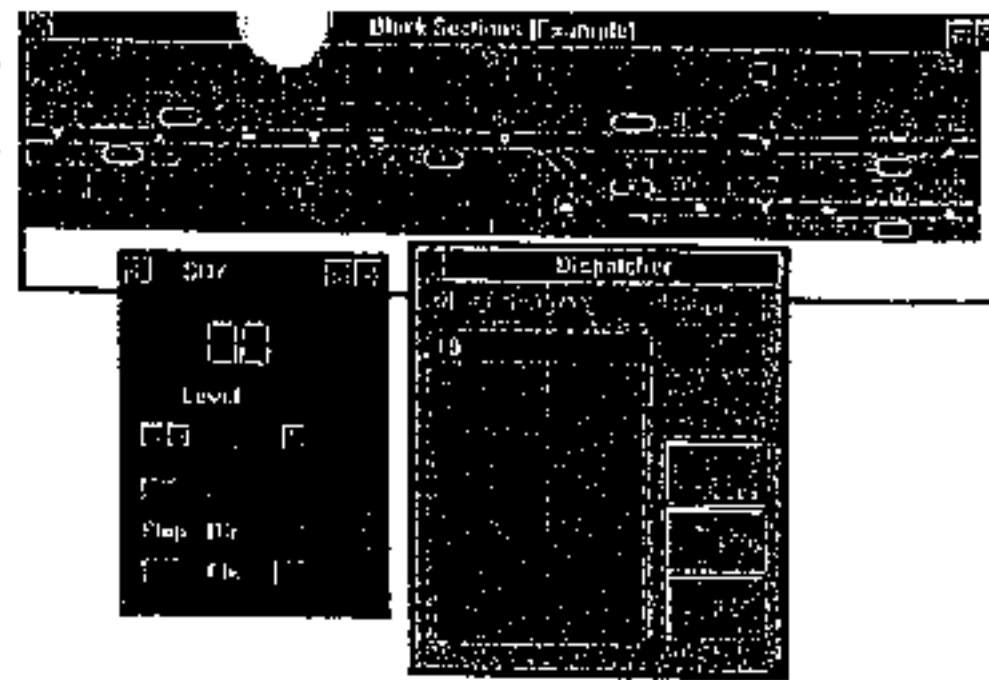


Tanner Declaration Exhibit C

WinLok 2.0 Brings New Functionality to DCC

by Larry Puckett



Earlier this year (March 1995) we took a look at WinLok Version 1.5 and promised an update as soon as the new version was released; so here it is. For those of you who missed the March issue, WinLok is a Windows-compatible program that allows you to interface your computer with many Digital Command Control (DCC) systems to control locomotives, switches and potentially, whole layouts. All of this can be accomplished using off-the-shelf components, giving you any level of control and automation you desire without having to resort to building sophisticated interfaces and components such as Bruce Chubb's CMRI system. Many of the features I described last March remain essentially the same so I'm going to concentrate on the two most important improvements, timetables and support for the Digitrax LocoNet communication network.

Timetables are the heart of WinLok's ability to automate train operation on your layout. Basically, timetables are programs that you write using a PASCAL-based programming language. Once a timetable is developed it can be assigned to a throttle for execution by the locomotive(s) assigned to that throttle. The automation includes control and monitoring of switches, block occupancy and locomotive speed and direction. More importantly, both automated trains on a timetable and manually controlled trains can be operated at the same time. This means that you could be operating a local switcher while passenger and through trains run past you on their timetables.

Learning the timetable programming language is going to involve a steep learning curve unless you're already familiar with PASCAL. Over 60 pages of the 182-page manual are dedicated to this subject. If you're like me, the most useful section will be the two example timetables that are provided. One example shows how to automate a push-pull commuter train while the other covers control of a train entering a hidden yard. I'll be going over timetable programming in a few months once I have a chance to gain some familiarity with it. Naturally, for this type of automation the computer has to have some means of detecting whether the track ahead is occupied and which way switches are thrown. The version of the software I received supported Märklin serial sensor feedback modules and an upgrade

just out includes drivers that support Digitrax's new DS54 stationary decoder — which brings us to the next topic.

In Version 1.5 WinLok supported Digitrax systems through the Direct Drive driver. While this functioned very well it meant that only WinLok's on-screen throttles could be used to control locomotives. Obviously this limited walk-around operations! WinLok 2.0 now has Digitrax LocoNet drivers that allow both the on-screen and hand-held DT200 and BT2 throttles to function in concert. In addition to mixing computer and hand-held throttles the new driver allows the various locomotive decoder addresses to be stored in the computer between operating sessions and then dispatched to the system at the beginning of the next operating session. This dispatching capacity includes the ability to display computer throttles for a given decoder address and monitor the speed and status of the locomotives under manual control. All of this now makes it possible to create a graphic on-screen representation of a layout from which a dispatcher can throw remote switches, monitor block occupancy and locomotive status, assign locomotives and control trains. The most impressive aspect of this is that you don't have to run miles of wires from the CTC panel to all the switches and detectors — now all the signals are transmitted bidirectionally through the DCC signal!

WinLok 2.0 is impressive, but there are still a lot of new features that I would like to see added. Although WinLok can access and control consists created by a DT200 throttle, you cannot create and dispatch consists to the system, only individual locomotives. Also at this time WinLok cannot act as the master controller, you have to have a DT200 running the system, and the computer acts just like another BT2 "Buddy" throttle. Having this capability would allow users to combine the computer with a booster and BT2s to create a system without having to purchase the DT200 or the soon-to-be-released DCS100 command stations. Both of these features may be included in the next release of WinLok. Another limitation of WinLok 2.0 is the rudimentary programming capabilities — you still can't enter or modify speed tables. Hansruedi Tanner, the developer of WinLok, has produced a program for Digitrax

that will be released with their PRI programmer that will allow advanced programming; a similar feature will be added to WinLok. As usual, time or the lack of it, is the reason all of these features didn't make it into the latest release. Hansruedi recently finished his doctorate, and it's amazing he had time to add what he did.

WinLok 2.0 requires a 386 or better processor, serial and/or parallel port, Windows 3.X, a mouse and about 4 MB hard disk space. The setup utility does all the work for you, even creating the working directory and program group. Documentation is extensive (182-page manual). A new tutorial carries you step-by-step through the basic setup and operations. The software-only package sells for \$119.95 and upgrades from Version 1.5 are \$29.95 from Digi RR Enterprises, 10395 Seminole Blvd. #H, Seminole, FL 34648. They are also a Digitrax dealer and offer several economical package deals.

Now for the rating (1-5, 5 is best):

Documentation	4.0
User Friendly	4.0
Technical	5.0
Application	4.0
Value	4
Level	2-5

That's all for this session. Until next time, stay on the right track and don't run out of steam. Send your comments, questions and programs to: Larry Puckett, 9618 Dublin Dr., Manassas, VA 22110. For those of you on CompuServe my userid is 71064,22 — feel free to leave me a message. If you submit a public domain or shareware program for review in this column please indicate whether or not you are willing to provide copies for interested readers and the conditions for that exchange. I

