

Virginian Layout



Between
Norfolk & Roanoke
1959
by Bill Mosteller, © 2025
Greatdecals.com

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Bob Sprague

- Layout Design Clinic
 - *The Lesson:* All rooms have challenges
 - I don't wish to fix them with gates or lift outs

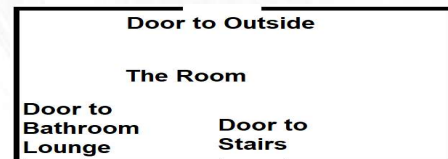
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Background

- For a decade, Sarah's asked me why I don't put a layout in our 13' by 39' basement room
- I didn't know what to do, so I went to Bob Reid, who'd moved to Florida but was as close as e-mail

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Let's Not Block Any Doors!



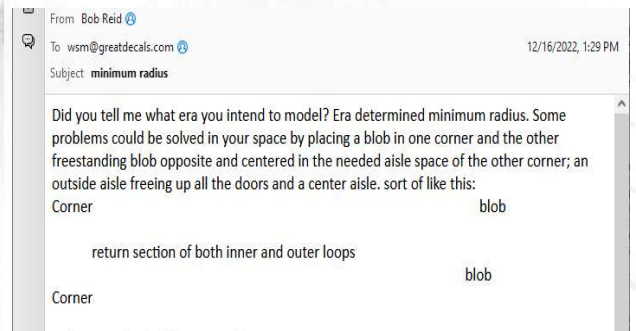
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Bob Guides Me - 12/1/2022

- Q: What do you want?
 - A: The Virginian Railway
- Q; Where?
 - A: Norfolk to Roanoke (no electrics)
- Q: When?
 - A: 1959, Virginian's last year (and no steam)

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Bob Reid's Idea



Bob Reid's Idea

- Offset the blobs (cocktail napkin drawing)
- *"A picture is not a proof!"*
- I recreated it with a kitchen design tool and the measurements worked!

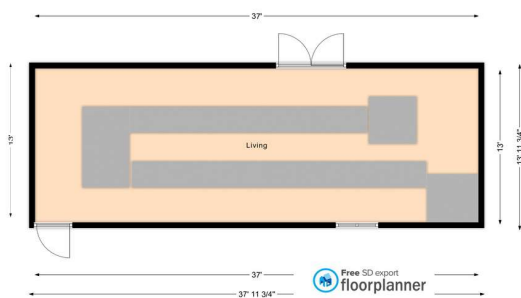
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After Much Work - Dec. 18, 2023



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Kitchen Design Tool Output



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Things About the Design

- East is right and west is left
- But trains go down from Norfolk to Roanoke (reverse of real geography)
 - Necessary for double ended staging
- Major yard (Victoria) is far from Staging
- Took about a year

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I Hire Bob Sprague

- He says I can have 5 towns
- I check the Virginian timetable and pick **Suffolk, Jerratt, Victoria, Brookneal, & Alta Vista**
- I send him town track diagrams from the Society
- Added Alberta later
- bobstrackplans.com/

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Now What?

- **My goal is operating sessions**
- I'm not a great carpenter
 - I've never solved the ramp on my 4' by 6'
- I'm 78 years old
- *Hire a layout builder!*

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Find a Builder

- I identified a half-dozen viable builders
- I fired one
- Some didn't want to build the design
- Settled on Dave Bennett of traininstallations.com

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Surprises

- The Digitrax systems friends had weren't what's now on sale
- Fascia plugs aren't as important
- Probably over configured (2 boosters)
- Wanted UT4R compatibility – added UR91 radio

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The Build

- I hit them at a time of low backlog
- I insisted on a site visit before the build started
- Only took seven months
 - Good to be smart, better to be lucky!
- Ordered without scenery, other than ballasting
 - Only NMRA AP Certificate I might still get
 - *"The real Virginian had no trees or rocks -- just track on plywood roadbed."* Mike Dodd

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Dale Latham's Advice

- *"If I was starting over, I would make 48" as my minimum height"*
 - Went with that
 - Suffolk is 54"
- Ultimately ordered a custom step stool from an etsy seller for Suffolk (it's high *and* deep)
- Also useful for younger visitors

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Suffolk & Alberta - July 10, 2024



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6' Operators Like the Stool



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Turnout Controls

- Starting point was ground throws for everything, but...
 - Hidden Staging
 - Suffolk
 - Alta Vista main out of Staging

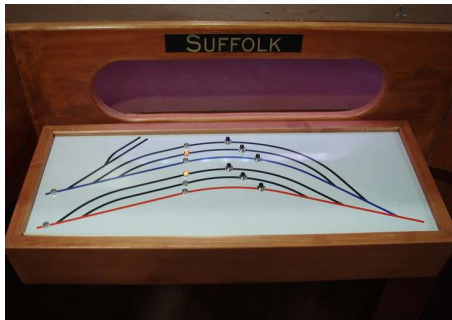
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Motive Power

- Knowing the layout was coming, I stocked up on Atlas Virginian Train Master locomotives
- Tom Matty was very helpful in transforming an assortment of misfits into a locomotive roster

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Staging Controls



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H16-44 Locomotives

- Train Masters really lived west of Roanoke
- I'd tried to get Bachmann H16-44s DCC'd
- Railroad Lunch friends suggested two new Midwestern installers – success!
 - houseoftrains.com/
 - enginehouseservices.com/
- Starting to be used in operating sessions

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Issues

- Thrilled that locomotives are detected
- UT4R throttle can't throw Alta Vista turnouts
 - Added turnout push buttons under the fascia
- One operator suggested paired Staging Panel buttons
 - How many \$100s is that worth?

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Tune-Up Visit - Aug. 20, 2024

- Town name labels
- Illuminate hidden staging with rope LEDs
- Direct west access to all Victoria tracks
- Restore missed interchange track
- Turnout push buttons for Alta Vista crossover and “new” interchange track
- Added fascia plug
 - I'm still fighting the last war

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Operating Sessions

- Having NMRA AP Dispatcher certificate still left challenges
 - Operating Scheme design is hard
- Nobody liked my initial design, including me
- Version 2 has supported several sessions
 - My thanks to Dale Latham and Bill Roman for their ideas
- Less staging use in second operating scheme

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Current Operating Scheme - 4 Jobs

- From Victoria:
 - Suffolk (East) Turn
 - Alta Vista (West) Turn
- Suffolk Shifter
- Through Train
 - Staging to Victoria & Back
 - Victoria Yardmaster

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Digitrax Challenges

- Operating sessions revealed a couple of issues with the installation related to engines crossing power districts on a busy railroad
- Gil Fuchs was tireless in identifying and correcting the problems

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Considering Adding

- Coal Drag
- Emptys Drag
- Passenger Train(s)
- All this requires a “fast” clock

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Demonic Possession

- Idle locomotive takes off like a bat out of hell
 - Layout electrical event makes decoder think it's not on DCC
 - Switches to DC mode and decides is at max
- Use Decoder Pro to turn off DC capability

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Operating Sessions

- First one was August 13, 2024
Twelve subsequent sessions
- 23 different operators

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Tune-Up Visit - Feb. 26, 2025

- Connect track status lights on 2 fascia plugs
- Continuous charging power to fascia plugs
- Fix dead spot on Lane turnout in Alta Vista
- Adjust seven turnouts around the railroad
- Free up on stuck staging turnout
- Eliminate bump in west Victoria
- Research Alta Vista turnout control after short

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Victoria, Staged & Ready



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Post Tune-Up Surprise

- Major Suffolk Turnout Shorts w/Engines
 - Sure glad I insisted on sockets for the Tortoise and Smail machines

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Conclusions

- Many people contributed to the success of my railroad

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Tune-Up Visit - April 17, 2025

- Correct Alta Vista turnout control after short
- Connect Track Status indicator on UR91
- Suffolk turnout short still a puzzle
- Hidden Staging turnout control after short needs research

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