Clinic for NMRA MCR “Rails to the Capital” Convention
April 28th to May 1st, 2016 – Columbus, Ohio
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Clinic Outline – Small Shelf Layouts

- Introduction - Motivation
- The John Allen “Timesaver” and Inglenook
- The British Scene
- Examples of British Shelf Layouts
- Examples of American Shelf Layouts
- Back to the Timesaver and the Inglenook!
- What Makes A Good Shelf Layout
- Design Study – The C&O in Columbus, 1940-1950
- Summary
- Some Good References
- Acknowledgements
- Demonstration (If there is time!)
Introduction - Motivation

• “No Room for a Layout”
• Want more than just a diorama
• Possibly a start to a future large(r) Layout
• Want something that can be “finished” in a reasonable amount of time and money
• A small layout can be detailed more easily
• Desire Operating Realism even for a small footprint
• Experimenting with: a “new” scale or gauge, track or scenery technique
• Display your prize model locomotives and cars in action!
• Etc., etc., etc……..
Simple Historical Designs

1. The Time Saver

These are Switching “Puzzles” or Games; They Lack Prototypical Operation – But wait, There’s More!

2. The Inglenook
The British Scene

- The British (and European) Model Railroading Scene has developed the small shelf layout concept to a high degree
- Motivated by little living space for a large layout
- Emphasis on exhibition Layouts that can be brought to Model Railroad Exhibitions and Shows
- Focus on modeling one scene, specific place and time
- Operational capability very important to keep the observers’ attention
- Lots of good examples published in *Hornby, Railway Modeler* and *Continental Modeler* Magazines
- We can learn from them!
Some Examples of British Shelf Layouts

Let’s Look at various Types with various features:

• Simple Shelf Layouts
• Small, Medium and Large Shelf Layouts
• Staging and Fiddle Yards
Ashleigh – OO/HO

- 4.5 ft. by 12” Shelf Layout plus staging or fiddle yard
- It doesn’t get much simpler or smaller than this!
- Does have both passenger and freight operating potential
- Could be up and running in a short time
- Best served as a display layout for rolling stock and locomotives
- From Railway Modeller, 09-12 (used with permission)
Little Histon – HO (OO)

- Branch Line Terminus – almost like a “Time-saver” plan
- Fiddle yard off to the left – can be a detachable cassette
- Both passenger and freight activity in a small space
- 8 ft. by 1.5 ft. Shelf plus fiddle yard
- From Railway Modeller, Oct. 2012 (used with permission)
Swyncombe – O Scale

- Similar to Little Histon – Fiddle yard off to the left
- End of the line terminus – Both freight and passenger traffic
- From Railway Modeller 2012 Annual (used with permission)
St. Antoine sur Mer – HO Scale

- End-of-the-Line Terminus
- Fiddle Yard behind a backdrop – no need to extend the total length of the layout
- Sea side wharf/port scene – includes rail-water interchange!
- From Continental Modeller, Dec. 2012 (used with permission)

One of My Favorites!
Hook Basin – Gn18 (1:25 scale, HO Track)

• Industrial Narrow Gauge
• 8.5 X 1.5 ft
• Has Run-around
• Several sidings for Switching
• Railway Modeller, Oct. 2012 (used with permission)
Chewton-Mendip – 00/HO and 009

- 7.5 ft. by 18 to 22 in.
- Both standard gauge and narrow gauge (HOn30)
- Fiddle yard on left is a 3-track sector plate
- Narrow gauge industrial Ry. transfers loads to standard gauge Ry.
- From RM 12-12 (used with permission)
Sheepcroft Yard – HO (OO)

End of Branchline Terminus Railroad by John Flann

- L-Shaped – 13 ft. by 8 ft.
- Includes a Run-a-round Siding
- Fiddle yard on one end for Staging Trains
- Lots of Industries to switch
- From Railway Modeller, Nov. 2012
  (Used with permission)
- See p. 82 of Model Railroad Planning 2016 by Kalmbach for an update
Llanerfyl – Welsh Narrow Gauge

- **O scale Narrow Gauge** in only 14 ft. by 7 ft.
- **HO track gauge**
- **L-Shaped – with fiddle yard**
- **O-16.5 scale – same as On30**
- **Includes and Locomotive Facility**
- **From Railway Modeller, Oct. 2012 (used with permission)**
Evenstowe – OO/HO

- 11 ft. by 20” Shelf
- End-of-the-line terminus
- Fiddle yard on the right – can be either a multi-track yard or sector plate or cassettes
- Harbor scene adds interest, looks like inbound trains come from somewhere else!
- Passenger and Freight operations
- Several industries – coal, cattle, general freight, etc.
- Fiddle yard additions makes it pretty long – could wrap it around in an L-Shape Footprint
- From Railway Modeller 07-12 (used with permission)
Banff – N Scale

- 7 ft. by 16” Shelf Layout – end-of-the-line terminus
- Sector Plate fiddle yard – adds another 2 ft.
- Hidden storage feature (tracks behind the scenery) in combination with sector plate provides opportunity for many more trains to run in a given operating session
- Has Locomotive facilities, passenger and freight operations
- From Railway Modeller 07-12 (used with permission)
Albion Yard – OO/HO

- 10.3 ft. by 21” shelf layout – includes two-track staging fiddle yard
- Car storage tracks for make-up and break-down of trains
- Might need a detachable cassette at left end to provide a switching lead for yard tracks
- From Railway Modeller, 09-12 (used with permission)
Fisherrow Yard – O Scale

- 8 ft. by 16” (O-Scale) – plus staging or fiddle yard on the right
- A “Sea Side Scene” - Fishing Industry
- Looks too simple - but looks are deceiving!
- Designed for two locomotive operation – Don’t need a runaround track!
- Great scheme for exploring O Scale or On30
- From Railway Modeller, 09-12 (used with permission)

One of My Favorites!
Hennock - TT

- Also A Through Station/Town
- 6 ft. by 16” in TT Scale, about 8 ft. by 22” in HO Scale
- Needs two staging/fiddle yards, one on each end
- More interesting operating possibilities – “East and West bound” trains can exchange cars
- From Railway Modeller, 09-12 (used with permission)
Hennock - Photos

The Scammell sets off on its errands from the busy goods yard. There is a lot of traffic to be dealt with today, including a container.

The delicate nature of the station fencing is evident, as it snakes its way round the cattle loading siding.

The S7xx crosses with the auto train as it prepares to shunt the yard.
Porthwenn – O 16.5/On30

- L-shaped Layout – O scale Narrow Gauge
- 8 ft. by 5 ft. plus staging
- Fiddle yard or cassette staging off to the right
- Water – Rail Interchange
- Lots of freight switching and passenger operations
- From Railway Modeller, 04/12 (used with permission)
Porthwenn, Cont’d.

One of My Favorites!
Some Examples of American Shelf Layouts

- Straight Shelf Layouts
- L-shaped Shelf Layouts
- With and Without Staging
Sherman Paper Company – HO Scale

- Single Industry Switching Layout – 8 ft. by 12 in.
- Variety of Car types
- Several car spots
- Don’t need a staging or fiddle yard, but it would help

From Model Railroad Planning, 2006, by Linda Sand, used with permission
Winter Hill Branch - HO

- Three Industries in one area
- Variety of Car types and car spots
- Can have a train deliver and pick up cars, and local area switcher collect out-bounds and spot in-bounds

Taken from Model Railroader Magazine, January 2013, Used with Permission
Troy Industrial Track

Reference: Railroad Model Craftsman, November 2012, p. 68
(Used with Permission)

- 5 ft. by 8 ft. L-Shaped Shelf, 12” deep
- patterned after prototype location in Troy, NY.
- By William Gill.
Switchman’s Nightmare

Linn Westcott’s classic Switchman’s Nightmare track plan has all the makings of an engaging terminal railroad layout: interchange yard, industries, and a runaround tying them together. Byron used these elements in his 4 x 8 plan.

Original Plan was published in “101 Track Plans for Model Railroaders” by Linn H. Westcott, Kalmbach Publications, c. 1956, plan no. 6.
Switchman’s Dream

This is Byron Henderson’s Redesign of the “Nightmare” into a 4 ft. by 8 ft. Layout with yard and industrial area

From Model Railroad Planning, 2011
Switchman’s Dream Revisited

Using basic 4 by 8 plan by Byron Henderson (MRP 2011), and Tony Koester’s “Track Planning with scissors and tape” article in MRP 2011, a nice L-shaped switching layout can be built. It is suggested that the mod’s shown be made to make the reach-in distance to the corner less than 30”.

Switchman’s Nightmare and Switchman’s Dream

From Model Railroad Planning, 2013.

From Linear shelf layout to 4x8 to L-shaped shelf layout
Frazer – An Industrial Switching Area

A Town on Bob MacKendrick’s West Chester (PRR) Railroad: Inspiration from a small piece of a large Model Railroad!
Frazer Track Diagram

Bob MacKendrick’s West Chester Division of the Pennsylvania Railroad was featured in *Rail Model Journal*, October 2004.

One of My Favorites!
The “right” end, storage tracks and entry to switch back – serves as scenic staging for the industrial area.
Frazer – Industry Area

No Run-around track, but all industries can be switched using two engines or car-positioning on incoming train
Modern Industrial Layout - HO

5 ft. by 9 ft. U-Shaped Layout by Linda Sand,
Model Railroad Planning 1999, used with permission
Revised Plan: L - Shaped

- 9 ft. by 9 ft. L-Shaped shelf Layout
- 18 in. deep shelves
- Modern Industrial Setting
- Lots of switching opportunities
- Can add cassette staging at yard leg

One of My Favorites!

Add Cassette Here
A Revised Time Saver Plan by John Flann, *Model Railroad Planning*, 2003. Tracks are extended to provide actual industries to pick up and spot cars. John’s operational method used a random drawing of car cards to decide which cars to pick up and which cars in the train to spot. Other methods are applicable, e.g., car cards and waybills, switch lists, etc.

NEWS FLASH: See March 2016 Model Railroader Magazine article by Robert Pethoud on operating a small switching layout – similar to above track plan
Back To The Inglenook ....

- A single-industry modeled from real life
- 4 ft. by 1 ft.
- N-scale
- Saw Mill in the woods
- See RMC, January 2014

The Inglenook can be operated as a realistic industry setting, with cars in, cars out, based on real prototypes. See the Dawson Station web site, www.dawson-station.blogspot.com
What Makes a “Good” Shelf Layout?

- **Size** – Fits the area you have available!
- **Not just a Puzzle** – Realistic Operation
- **Realistic place, time, era and railroad equipment**
- **Operation with a Purpose**
- **Key Features nice to have:**
  - Locomotive Run-around Capability
  - Adequate run-around length to fit the train length
  - Siding Lengths appropriate to car traffic
  - Staging or Fiddle Yards to feed the “On Stage” Scene
- **Suggested Options for Shelf Layout Design:**
  - Through Station/Town
  - End of the Line and/or Branch Line
  - Single Industry (Quarry, Logging, Mining, Paper Mill, Brewery) with a variety of traffic – loads, empties, different car types, etc.
  - Industrial Park – Interchange with main line, variety of traffic
Generic Shelf Layout Ingredients

The “Stage” – The Scenicked Layout

- Has a Theme, Era, Place
- Where the Operations Happen
- Connects to one or both fiddle yards
- Car movements can be done by switch lists, car cards, or random draw methods

Off-Stage (West or North)
- The Fiddle Yard
- Can be a conventional multi-track yard
- Can be a sector plate or transfer table
- Can be a set of cassettes

Off-Stage (East or South)
- The Fiddle Yard
- Can be a conventional multi-track yard
- Can be a sector plate or transfer table
- Can be a set of cassettes

One or the other or both of these

These ingredients can be in a straight line, an L-shape or a U-Shape. They can be straight or curved – whatever fits, and whatever strikes your fancy!
Design Study – Modeling prototype C&O operations in Columbus in the 1940’s and 50’s.

- Based on old 1939 railroad track maps and information provided by Jim Kehn and Dick Argo
- Focus on areas with interesting switching operations
- Follow prototype as close as possible within the constraints of a “practical” shelf layout – i.e., not too big!
- Selected two designs:
  The “Neil Track” - or a portion of it!
  The “Badlands” Brewery District – or a portion of it!
The Neil Track Switching District Map Overview
Neil Track South End Interchanges
Neil Track North End Industries
Neil Track Industries

Capital City Dairy
The Neil Track

10 ft. by 6 ft. “Inside Corner” L-Shaped Layout (18-inch wide shelves)

Six Industries:
- Washington Brewing Co.
- Capitol City Dairy Co.
- Rood Lumber Co.
- Columbus Coffin Co.
- Schontal Iron Co.
- Central Ohio Oil Co.

Three Interchanges:
- C&O Railway
- Pennsylvania RR
- Big Four (NYC)

Freight Car Types:
- Box cars
- Reefers
- Flat cars
- Gondolas
- Tank cars
The “Badlands” Brewery District Map
Overview
Brewery District South End
Brewery District North End
Brewery District Structures

Jones Heel Mfg. Company

Frankfort Street Tower
(Toledo & Ohio Central Ry.)
Brewery District Structures, Cont’d.

The L. Hoster Brewing Company

Milwaukee Beer & Ale Kit
12-3/8 x 10 x 12 inches
Walthers Part # 933-3024
The “Badlands” Brewery District

“Outside Corner” L-Shaped Shelf Layout – 12 ft. by 7 ft.

Three Breweries and three other industries:

• Columbus Brewing Co. (C.B. Co.)
• Gambrinus Brewing Co. (G.B. Co.)
• Hoster Brewing Co. (H.B. Co.)
• Columbus Terminal Warehouse (C.T.W.)
• Columbus Anvil and Forge Co. (C.A.&F. Co.)
• McDonald Foundry (McD.F.)
• Power House (P.H.)
• Jones Heel Mfg. Co. (J.H. Co.)

Interchange with the C&O Railway

Car Types:

• Box Cars
• Reefers
• Gondolas
• Flat Cars
• Hoppers
Summary

- If you have a wall that you can hang a shelf on, you can design a shelf layout that will provide realistic operation.
- Shelf layouts come in all shapes and sizes.
- Shelf layouts can be any theme, prototype, era, scale.
- There are lots of references and material to draw upon for inspiration, including the internet!
- You can get a shelf layout up and running in a short time.
- A shelf Layout is a great way to explore a new scale, new era, a new theme, to see if you like it before committing to a large layout.
- Go design and build one! And operating it can be fun!
Some Good References

- Railway Modeller Magazine: Peco Publications, Devon, U.K.
- Layout Design Special Interest Group web site and LDSIG Journal
- Various issues of Model Railroader Magazine and Model Railroading Planning Annuals
- Various issues of Railroad Model Craftsman Magazine
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Questions?