BUILDING THE IRON HORSES

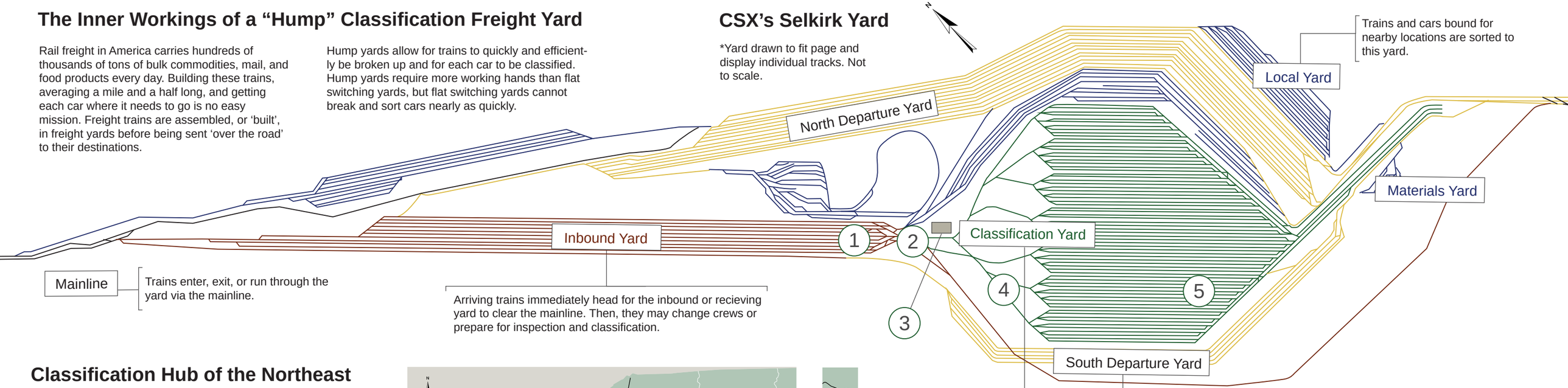
The Inner Workings of a “Hump” Classification Freight Yard

Rail freight in America carries hundreds of thousands of tons of bulk commodities, mail, and food products every day. Building these trains, averaging a mile and a half long, and getting each car where it needs to go is no easy mission. Freight trains are assembled, or ‘built’, in freight yards before being sent ‘over the road’ to their destinations.

Hump yards allow for trains to quickly and efficiently be broken up and for each car to be classified. Hump yards require more working hands than flat switching yards, but flat switching yards cannot break and sort cars nearly as quickly.

CSX’s Selkirk Yard

*Yard drawn to fit page and display individual tracks. Not to scale.



Classification Hub of the Northeast

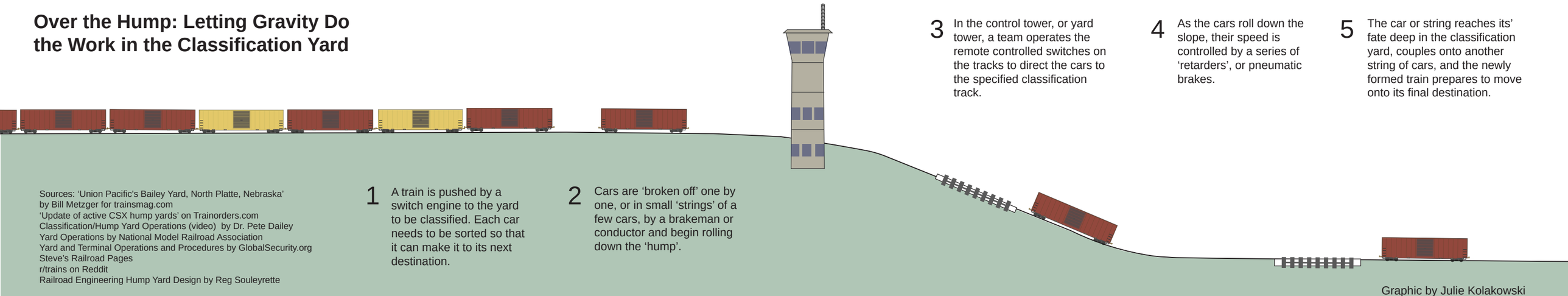
Although class I railroads have been closing many hump yards over the past few years, hump classification is still used. Usually companies will have a hump yard in each region of their service area. Flat switching is used in other yards, where locomotives push or pull cars around the yards to classify and build trains.

For the east coast-based company CSX, their Selkirk Yard is the main hub for classification of general manifest trains in the northeast. Other regional hump classification hubs for CSX include the Rice Yard in Waycross, Georgia, the Queensgate Yard in Cincinnati, Ohio, the Big Four Yard in Avon, Indiana.

Trackage owned by CSX

Major yard or crew change point

Over the Hump: Letting Gravity Do the Work in the Classification Yard



1 A train is pushed by a switch engine to the yard to be classified. Each car needs to be sorted so that it can make it to its next destination.

2 Cars are ‘broken off’ one by one, or in small ‘strings’ of a few cars, by a brakeman or conductor and begin rolling down the ‘hump’.

3 In the control tower, or yard tower, a team operates the remote controlled switches on the tracks to direct the cars to the specified classification track.

4 As the cars roll down the slope, their speed is controlled by a series of ‘retarders’, or pneumatic brakes.

5 The car or string reaches its’ fate deep in the classification yard, couples onto another string of cars, and the newly formed train prepares to move onto its final destination.

Sources: ‘Union Pacific's Bailey Yard, North Platte, Nebraska’ by Bill Metzger for trainsmag.com
‘Update of active CSX hump yards’ on Trainorders.com
Classification/Hump Yard Operations (video) by Dr. Pete Dailey
Yard Operations by National Model Railroad Association
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Steve’s Railroad Pages
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Railroad Engineering Hump Yard Design by Reg Souleyrette

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