

My involvement with flame straightening started in 1977 in Kissenger Missouri. On the Burlington to St Louis route for the Burlington Northern Railroad.

There was a derailment of a freight train on Br 77.1. Lots of damage from the derailment and lots more from the clean-up.

That is where I met Fred Holt of Fred Holt and Sons Flame Straightening (Dave and Dan). The through plate girder had damage to the entire floor system, the floor beam to girder connections, the girder to stringer connection. The top cover plate where bent up enough that the rail hit the cover plate so to get the trains across the ties had to be shimmed up to get the trains going.

The main girders on the north end of the bridge 2 1/2 feet back where bowed out 18" on both sides. The processes used brought everything back into line. It took some time but was estimated to be about 10% of the cost of replacement, we where there for weeks.

I moved back to the Seattle area was Supervisor in Everett, Fred had retired and Dave took over the business. He had work on a job that required an union ironworker. There was a derailment on the Seattle to Chicago line through truss at Index. It bent the end post and several hangers and tore one loose. Fred and Dave both came up and looked at the job; that when I met Dan Dalton for the first time. Dave used him as his lead man. After they worked a couple of days Dave left Dan there to finish the job.

Dave developed skin cancer and sometime did not come out to the jobs; that was the case when an ocean going barge out bound on the west Duwamish water way hit bridge 36.8 35 feet above the water line kinked the 185 foot bascule bridge out of line 3 1/2 feet and bent the main pivot point bearing 18" out of line. I called Dave and he sent Dan out the estimation was for the bridge to be out of service for 21 days That was at 900 pm that night, this was an industry spur that handle Alaska barge busines and scrap steel and inter change busines with the UPRR.

Dan took charge and Dave stayed at home. The flame straighten the bridge was a long process was done in 21 days working 16 hours a day 7 days a week just like Dan and I estimated.

Dave passed away and Dan Dalton bought the business. The same integrity that he had when he ran the business for Dave Holt. He brought to his business.

I have had Dan work on a double track bascule bridge Br 6.3 that lifted off the southwest seat 3 inch which did not allow the bridge to seat rendering both tracks out of service! Seattle to Chicago route. He put a heat to them restoring the seat. On the same subdivision a double stack train inproperly loaded hit a road bridge height of 20 feet 6 bending the lower flange angle to a height of 19 foot 8 inch which took away the BNSF ability to run double track business under this bridge. I called Dan as soon as I saw the problem he was in Texas flew out that morning that afternoon we where on the track flame straightening the bridge the next day he and his crews restored the clearance and as we cleared the tracks 28 stack train could then move in and out of Seattle.

Br 38.3 Seattle to Vancouver B.C. route; a swing out off line 3 inch and would not close and lost all camber that a north bound train would lift the north wedges 2 inches off the bridge seats and cause the bridge to loose signal.

Br 29.4 on the Seattle to Portland line double track through truss lost all camber and had excessive pin ware. shrank the I-bar and added dewey dag rods and restored camber. I had the maintance forces from the Puget Sound and Pacific a short line railroad formally owned by BNSF Railway. They had 2 bridge both through trusses slowed order to walking speed one lost camber and had frozen expansion joints the other was out of line and Dan flame straighten both and restore them to normal track speed. On the Black River to Woodinville line on Br 11.7, I-beam bridge over Rainer Ave. hit by a low boy carrying a excavater which hit the bridge at high speed bending the I-beam on a 34 foot bridge 2 feet out

of line this bridge control all movements in and out of the Boeing Renton plant; out of service only 2 days and did not effect the production of there plane'sat their plant.

This process allows your bridge to stay in service with out costly down time manufacturing parts and then replacing them.

Not only have I watched it; I have worked the magic of the flame!

Scott Kipperberg

Supervisor Structures (retired)