Motorcycle

CAT to the Rescue at Peoria - Again!

By Mitch Boehm Editorial Director of americanflattrack.com

Sometimes, small measures are just not enough. Sometimes, when there's a big – or vitally important – job to do, you need to bring in the Big Guns. Use Strong Medicine. Or employ Extreme Measures.

At last year's 72nd Peoria TT, American Flat Track and the Peoria Motorcycle Club had to do exactly that. A week of rain prior to the event had turned the Thunder Valley floor into a sloppy mess, with near-total saturation, foot-deep mud and zero chance that weekend to run what had become one of the most legendary, anticipated and exciting flat track Nationals of the season – especially with Henry Wiles' 13-race win streak on the line.

Since none of the measures usually employed – Mother Nature, disking, running vehicles on the surface, or some combination thereof – were going to allow the race to run on Saturday, a meeting of AFT and PMC minds was called on Friday afternoon to figure out a plan. One of those minds belonged to John Swearinger, who was not only a longtime Peoria Motorcycle Club member and lifelong motorcycle enthusiast, but also a 25-year employee of Caterpillar, a company with deep roots in the Peoria area.

As a Service Engineer for CAT's Global Dealer Solutions Network, Swearinger knew that only extreme measures were going to save the weekend from being a total bust. "Some of the top-level guys from our Edwards Demonstration team – who teach owners and operators worldwide how to use their vehicles – were in town that weekend,"



Swearinger remembers, "and that seemed like the best way to get the racetrack ship-shape. After all, if they couldn't get the track raceready, no one could."

A plan was quickly devised. First, PMC staff would churn and aerate the top eight to 10 inches of soil for a few hours that evening with 4x4s, and just before midnight, larger CAT machinery disked and then sealed the surface from the evening's dew and humidity. The next morning came phase two, and it was a biggie. Basically, the Edwards Demonstration folks arrived on scene with a handful of massive earth-moving equipment, the stuff typically used to build freeways, and proceeded to tear up, pile up, aerate and re-layer the top two feet of soil and clay along the entire half-mile of track.

It all worked. The churning and aerating dried the tons of earth enough so that when it was all laid back onto the track it was firm enough to race on – with Henry Wiles going on to win his record 14th-consecutive Peoria TT in dramatic fashion. It was a near-perfect example of teamwork and partnership in action.

Fast forward to another meeting in Peoria earlier this year, this time with only PMC members in attendance. The discussion wasn't about mud but the legendary Peoria TT jump, which in the 72 years the circuit had hosted the legendary TT had become one of the most recognizable and iconic track features in all of racing.

The Peoria jump had undergone constant change in those many decades, from low and smooth in the early years to faster and steeper and just about everything in between in later years, especially after the spectator tunnel was rebuilt in the early 1980s. Use and erosion had made the jump even more daunting and quite a bit more dangerous, especially for the bigger, faster and heavier twin-cylinder machines, which were sidelined in the 1980s in favor or lighter and better handling 600cc and, later, 450cc Singles for the National TT.

The high degree of risk and danger wasn't just due to the steepness and speed of the jump but that the entire jump section was integrated into a slight left-hand dogleg, along



with the obligatory right-hander just after the landing. This meant riders had to begin turning left and cutting across the face of the jump as they launched. This 'turn-while-youleap' element often played havoc with the motorcycles, with riders getting sideways as they left the ground and, when landing, often being spit off their bikes in spectacular fashion – with predictable results. The cluster-crashes were numerous over the years, and many can still be seen on YouTube.

When AFT proposed bringing Twins back to the TTs for the 2017 season, the jump - then some 13 feet tall and a real launcher was an obvious concern. "Chris Carr [AFT's Chief Competition Officer at the time] said we'd need to change it or there'd be no race," says Swearinger. "We weren't going to give up the National, obviously, so we changed it, going from one big and steep jump to a jump in front of a jump ... a 6.5-footer at the beginning of a 100-foot table, with another 6.5-footer later on. It was a compromise, really, and for many fans it's been was a bit of a letdown, as riders weren't getting nearly as much air. So the fans weren't all that happy with it, the riders didn't seem to like it much, and we weren't happy with it, either."

Another problem with the revised 2017 jump was that, due to the pro's high speeds

exiting turn two, many riders were hitting the second jump just as they landed from the first. A race bike's suspension is compressing and then rebounding as the bike regains the ground, and this moment of chassis instability can be a problem if you hit another jump at the same time.

"What we wanted," Swearinger added, "was a more exciting and safer jump, one with a low trajectory but enough flying distance to keep things interesting for riders and fans."

To that end, PMC brought in experts from AeroView Services and Trimble Civil Engineering and Construction, who listened to what the club wanted in a general sense – a low-trajectory but long-flying jump – and then got to work designing the terrain geography to make it all happen. The Trimble folks surveyed the ground, AeroView flew drones overhead to map out the lay of the land, and then each contributed computer maps with the data that would eventually be downloaded into the actual grading machinery that would re-form the terrain.

And the source of those graders and excavation machinery? Caterpillar, of course, the Official Heavy Equipment Provider of American Flat Track as of April, 2019.





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