Behind the Wheels Podcast Transcription
Season 2, Episode 8
Recommended Practices: All About The RP's For TMC

ANNOUNCER
You're listening to Behind the Wheels with Doug Mason, Dave Walters, and Mike Yagley. This is a show where we talk about heavy truck and medium duty axle ends. Doug, Dave, and Mike bring close to 100 years of experience and expertise in the transportation business.

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MIKE YAGLEY
Welcome to another episode of Behind the Wheels. I'm Mike Yagley.

DOUG MASON
I'm Doug Mason.

DAVE WALTERS
And I'm Dave Walters.

MIKE YAGLEY
Well, one of the things that we talk a lot about on this podcast is TMC. We are big fans of the Trucking Maintenance Council and all the work that they do. And so, what we're going to do is we're going to dedicate this episode to talking about how RPs, which are recommended practices, how RPs are developed. And then we're going to take a little bit of a deep dive into one of the newer RPs that's coming out, RP 237c, which is about torque checking guidelines for the hub pilot of the disc wheels. I think this is going to be a very, very helpful discussion for the folks out there. I want to just dive right into it. So, Dave, you are, your position. We've talked a lot about your position with TMC. Why don't we start out by just sort of reviewing that? What's your role with TMC?

DAVE WALTERS
At TMC I have many roles, but as far as when you get into S.2 tire and wheel group, and just to kind of an overview of the whole process. At TMC, it's kind of different because you only have one voting member per company. I'm the voting member. I'm called the corporate member. You could have 25 people at TMC, but your company has one voting member. On all these RPs, on all the positions and all the chairman of the associates, and all the voting, you only get one vote.

DAVE WALTERS
My position has been the corporate voting person forever. Everybody says, "Wow, ain't that great?". Well, when an RP comes out of any of the study groups, I have to read over all of them and kind of make sure that I agree with them and that I'm doing my due diligence [inaudible 00:02:37] to make sure that nothing is said that we can't agree with. So, I have to read a lot of RPs and make sure that we can send in our comments and our vote yes or no on. Being the voting member, it's a great thing to do, but I read them all and I have to vote on all.

MIKE YAGLEY
You've talked a little bit about in your discussion on what you're doing, you've touched on an RP. Let's go back to the beginning. How is an RP introduced? How's the idea for an RP introduced? And then what's the path to developing an RP in TMC?

DAVE WALTERS
Here's the way they're basically introduced. On study group Monday, it's normally at TMC, it could be. We've had to change them sometimes Tuesday, but it used to be on study group day they have a leadership breakfast at 6:30 in the morning. And the leadership breakfast is where the leaders of that study group. Say for example, I'm in tires and wheels. I go, we set up this table, they come, and they give you a packet. And this packet contains either it can be from fleets or from associates. And they can say, "Hey, is there an RP addressing for checking guidelines for hub palliative wheels?". And we just say, "No, we don't have that RP". Well, this fleet or that fleet or this vendor or that vendor wants that. Then as a study group leadership at this breakfast, we say, is that in another RP?

DAVE WALTERS
Or do we have to create an RP? Once we say, "Okay, we're going to create this RP", when we come into our, we do task force, study groups all day. So, we're studying group. The only way to create a task force is when we have our business meeting, when we do our mini tech or our tech session is to say, "Hey, it's brought up that we need to write this RP or torque checking guidelines for a hub pallets disc wheels and the leadership committee already kind of has somebody in mind that, but it has to be voted on by the thing. So, they'll say "Dave Walters from Alcoa volunteered to chair this task force. All in favor, say, aye, aye, all opposed, say nay". And so that's how it kind of starts. Then the chairman is in charge of the first thing on an RP you have to define is the purpose and scope and the preface. What's it going to cover? Purpose and scope is how we're going to do that.

DAVE WALTERS
And then there has to be kind of like an introduction. This RP is going to cover this. This is how we kind of did it. Those three things have to be done first. And then the RP is developed in these taskforce groups. When we go into taskforce Monday, they'll give you an hour to start developing this with everybody in the room, give them their ideas. So, it's basically an industry document on here's what we believe the industry should know about torque checking guidelines for hub piloted disc wheels.

DOUG MASON
And this is why they're kind of called recommended practices, right? This is a conglomeration of experience and knowledge throughout the industry with technical leaders and really coming up with what is the best way the industry believes something should be done. And that's why it's really called a recommendation rather than a specification. Is that right, Dave?

DAVE WALTERS
Absolutely correct, Doug. And I'll jump way forward, but whenever you're done with this RP, people in that room have to vote, that it goes to the ballot. And then when it goes to ballot, TMC sends it out. You vote on it, but the people, the corporate members that vote and send back the results and the comments, you go over them, results, and comments. Then it's published. And "Hey, it passed.". But now there's a 90-day appeal process. Say, for example, if this company doesn't like what's written in this thing, they can write an appeal saying, "I don't believe that I liked this because of this, this, and that.". And then TMC, it goes to the board of directors and which I'm a part of that too. I then listen to these things, and we say, "Yeah, they got a point" or "No, they really don't have a point.". It's a very elaborate system to get an RP actually certified. To make it a part of TMC.

MIKE YAGLEY
It is a very elaborate system. You're bringing together the whole industry to try to agree on these practices, these recommendations. For example, this torque checking guideline that we're going to be talking about in a few minutes, how long did it take from the introduction of this RP to the publishing of it? So that our listeners have an idea of the kind of work that goes into this.

DAVE WALTERS
And I'll just state this to start with. Every RP has a different length and really the chairman of a committee, you're of an RP. I've been blessed. I've been chairman of probably anything to do with wheels. I've been the chairman of the committee at one time or another. You kind of have to have like a "Where do I want to go with this? And how can I do this?". Now, RP 237 is very different because what we did was, which is great about TMC. We're in a room and there's probably 40, 45 people in there. There could be as many as 10 fleets and 35 people from the tire wheel industry, axles, suspensions. And what I needed to do this RP correctly was to actually prove out that if we did this, we're changing the industry. We needed hardcore data state that, "Hey, instead of stopping at 50 to 100 miles and having your torque recheck, if we take it out for a five-to-10-mile test drive, come in, do our torque check, make sure that every lug nut is up to that torque or readjust those nuts?".

DAVE WALTERS
I needed hard data to prove that that was going to work. Luckily, I had a number of major fleets do this for me. And the data sheets that I was getting in was by the thousands. And I'm looking through all this stuff. This RP took a longer time because we really wanted, and I hate to say this, a year of testing. They got on and they did a year of testing and when we had all the data writing the verbiage is very quickly. So, some of our piece can be done within. And we only really have two meetings. We have the annual meeting; we have the fall meeting. When we say it took a year, that's pretty good because that means we introduced it at the one meeting, worked on it at the other one, we have two interim meetings and tires and wheels, and we're ready to vote on it within a year. That's pretty good. This one probably took two years or a little longer because of all the data that we had to get to prove that this five to 10 miles was going to work. And the RP.

MIKE YAGLEY
You touched on what this RP is about. This is the RP and that basically redefines well, there's an industry standard for like you were saying the five to 10 miles, but it also, this RP is basically giving fleets flexibility there on how they check their torque, how often they check their torque and so forth. Want to talk about that?

DAVE WALTERS
Yeah. And what we've found in this was, and this is very odd because I have thousands of data points. What we found was once they torque that, and they did everything correctly and that's probably the biggest thing. They cleaned up everything. I used the two drops of oil on the threads. They brought it up to torque, not just tighten them up then going around and letting it click. They brought it up to torque. They cleaned the wheels, cleaned the hub, did everything that that was supposed to be. And what we found was we didn't lose any torque, which was like, wow.

DAVE WALTERS
So, the one fleet said my interval, I was bringing trucks in and doing all this, and we found out because we knew we had our process under control. And that's the key thing. Now, the one fleet, it was really funny because the times that they had trouble with their trucks and these fleet maintenance guys know I had a road service call done here and I had a road, it was two road service calls. And so, it told the fleet director that if I do road service calls, I'm going red, they put like a little red thing in the maintenance saying, "Hey, that truck needs to be brought in to check the wheels because it had road service done.". We don't believe we got the kind of job that we want done by that. But in their own shops, they had no loss. It's only when they had road service involved. It was very educational for a lot of reasons as RP.

MIKE YAGLEY
That's amazing that they're able to maintain their torque indefinitely. If it's torqued properly, it just stays there. That's great to hear. I was reading through the spec and there's a point in the spec where it's talking about the fasteners and they say, "God, you need to take a look at the fasteners and evaluate if they're poor, if they're fair or if they're good.". But I didn't see anything that said, what is that? I'm sure there's there's industry standards for that, but maybe you could walk us through that.

DAVE WALTERS
Okay. What we were really trying to do here is because in our test fleets, we had a multitude of different types of trucks and in that, and so they were new. Okay. That's great. Or good meant, we didn't see any indication of rust and no indication of anything that could be bad. When we say fair, we're looking at hardware that, it has some corrosion, it has some debris, but it's not really taken out of service. Poor means they should probably take this out of service. So the fleet at first wanted that four grading systems for their own good, because what they wanted to know is can fair work as good as good or new. Poor meant they're going to change it anyways. But if it shows a little of that, can we keep using it? As we discussed many times in this show, you're stretching that as the spring and it goes back, they really wanted to know, okay, new, we knows good, good we know is good. Can fair actually maintain torque like one? And that was more for the fleet. So again, very valuable.

DOUG MASON
Kind of an experience thing as well, Dave. As they're doing these studies, I'm assuming that they were reviewing what the studs were like in the whole setup to establish what they thought was fair or good. And I know that we've, again, like you said, discussed previously that you can bring a used stud back up to basically new by just managing that properly in terms of the cleaning and in terms of the lubrication that you're using as well. That makes sense.

DAVE WALTERS
Yeah. I understood by what they wanted was, and the fleet level, what you understand and most of these RPS is they're trying to put criteria in their own shops to say, "Okay, we rate this support needs to be replaced. Do we rate it as a fair or does it have to be replaced?". And new and good was just kind of a given, you know what I'm saying? Fair was really the defining thing. It has something. Can we, like you said, get it back to where we think it's good and is it going to maintain torque? That's really what they wanted.

MIKE YAGLEY
I see that they're asking, and also one of the things I noticed in the spec that caught my eye, was that they're asking for a 30-piece sample. And I'll talk a little bit about the importance of a 30-piece sample. When you get a 30-piece sample of almost anything, if you get into the deep, into the statistics there's going to be some variation depending on the situation. But 30 pieces is a really good number. When you get 30 pieces of a trial, what that does is it helps you define a bell curve. And I think everybody knows what a bell curve of is. A bell curve is basically, it looks like a bell. And if you, you get a whole population of, of whatever, a whole population of torques, most of them are going to be in that tall part of the bell curve.

MIKE YAGLEY
There's going to be a few that are in the tail on the low side or there's going to be a few that are on the tail and the high side. But that 30 pieces gives you enough pieces that you can actually establish what that bell curve looks like. And one of the great things about that 30 pieces is that if you're seeing, like Dave was just mentioning, if you're seeing that the torque is dead on for that 30-piece sample, that your bell curve is going to be very, very tight. And you know you are under control. That also tells you, that when you start getting samples that you check it down the road sometime and you start getting samples that are outside of that bell curve, something has happened. Something is wrong and you have to chase that down. So that 30-piece samples sort of gives you a baseline that you can work from, and you can check against as time goes on.

MIKE YAGLEY
A perfect example was the situation that Dave pointed out there. Where they had somebody on the road, they had some road service done and they checked those samples and all of a sudden, those numbers are coming in way out of that bell curve. That told them that something happened here and gave them some data that they could go chase down. That's what that 30-piece sample is. And then that's also in the spec, it's talking about a spot checking and that spot checking is checking against that bell curve, checking against that 30-piece sample. "Hey, are we still coming in there? Is it still coming? Looking good there?".

MIKE YAGLEY
That's using statistics, but without using statistics. You don't have to go through the math. You get a pretty good feel. Once you have that bell curve, you'll have a pretty good feel. Once you have those 30 pieces, you'll know what to expect. You'll get a pretty good idea of what to expect. And you'll be able to identify when things are going a little sideways on you. This is a fantastic RP. I can see where the fleets are going to get a lot of use out of it.

DAVE WALTERS
Yeah. And from my point to what the industry had wasn't practical. And I remember going to our legal counsel at Drake and I told him, this was my idea. And he's like, anytime you can make any practice practical, I can defend that for the rest of my life. You know what I mean? When you guys write stuff that's not practical, that's hard to defend, but this would be great. It was a blessing from everybody, and it's really changed the industry because what once was written, we kind of proved that "Hey, here's another way of doing it and it's better and it's easy and you can do this.". It was a great RP for our industry.

MIKE YAGLEY
I encourage all of our listeners who are in the maintenance industry, anybody who's responsible for torquing wheels, take a look at this RP. It's RP 237c available from TMC. Very, very valuable. And like Dave just said, it'll change the way you do business. Really good stuff. Any final words, Dave, or Doug?

DOUG MASON
Dig into TMC, it'll be good for your business.

DAVE WALTERS
TMC is going to love you for that.

MIKE YAGLEY
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