

“What should we do?”

John Carter was not sure, but his brother and partner, Fred Carter, was on the phone and needed a decision. Should they run in the race or not? It had been a successful season so far, but the Pocono race was important because of the prize money and TV exposure it promised. This first year had been hard because the team was trying to make a name for itself. They had run a lot of small races to get this shot at the bigtime. A successful outing could mean more sponsors, a chance to start making some profits for a change, and the luxury of racing only the major events. But if they suffered another engine failure on national television . . .

Just thinking about the team's engine problems made John wince. They had blown an engine 7 times in 24 outings this season with various degrees of damage to the engine and car. No one could figure out why. It took a lot of sponsor money to replace a \$20,000 racing engine, and the wasted entry fees were no small matter either. John and Fred had everything they owned riding on Carter Racing. This season had to be a success.

Paul Edwards, the engine mechanic, was guessing the engine problem was related to ambient air temperature. He argued that when it was cold the different expansion rates for the head and block were damaging the head gasket and causing the engine failures. It was below freezing last night, which meant a cold morning for starting the race.

Tom Burns, the chief mechanic, did not agree with Paul's “gut feeling” and had data to support his position (see Exhibit 1). He pointed out that gasket failures had occurred at all temperatures, which meant temperature was not the issue. Tom had raced for 20 years and believed that luck was an important element in success. He had argued this view when he and John discussed the problem last week: “In racing, you are pushing the limits of what is known. You cannot expect to have everything under control. If you want to win, you have to take risks. Everybody in racing knows it. The drivers have their lives on the line, I have a career that hangs on every race, and you guys have got every dime tied up in the business. That's the thrill, beating the odds and winning.” Last night over dinner he had added to this argument forcefully with what he called Burns' First Law of Racing: “Nobody ever won a race sitting in the pits.”

John, Fred and Tom had discussed Carter Racing's situation the previous evening. This first season was a success from a racing standpoint, with the team's car finishing in the top five in 12 of the 15 races it completed. As a result, the sponsorship offers critical to the team's business success were starting to come in. A big break had come 2 weeks ago after the Dunham race, where the team scored its fourth first-place finish. Goodstone Tire had finally decided Carter Racing deserved

its sponsorship at Pocono—worth a much needed \$40,000—and was considering a full season contract for next year if the team’s car finished in the top five in this race. The Goodstone sponsorship was for a million a year, plus incentives. John and Fred had gotten a favorable response from Goodstone’s racing program director last week when they presented their plans for next season, but it was clear that the director’s support depended on the visibility they generated in this race.

“John, we only have another hour to decide,” Fred said over the phone. “If we withdraw now, we can get back half the \$15,000 entry and try to recoup some of our losses next season. We will lose Goodstone, they’ll want \$25,000 of their money back, and we end up the season \$50,000 in the hole. If we run and finish in the top five, we have Goodstone in our pocket and can add another car next season. You know as well as I do, however, that if we run and lose another engine, we are back at square one next season. We will lose the tire sponsorship and a blown engine is going to lose us the oil contract. No oil company wants a national TV audience to see a smoker being dragged off the track with their name plastered all over it. The oil sponsorship is \$500,000 that we cannot live without. Think about it—call Paul and Tom if you want—but I need a decision in an hour.

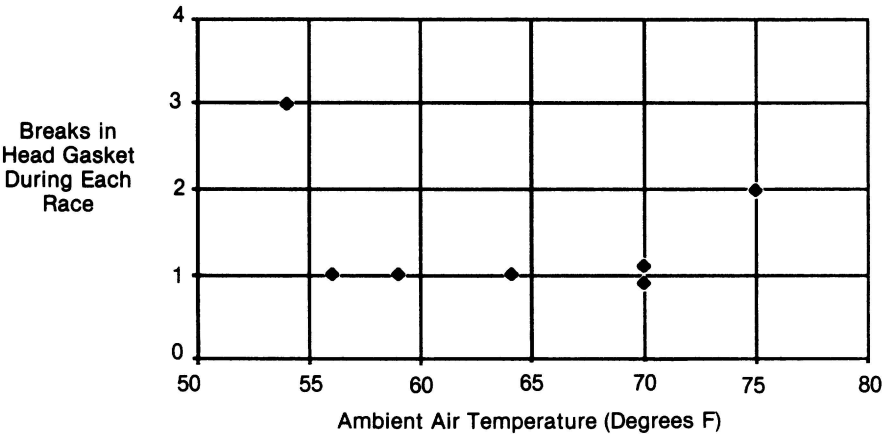
John hung up the phone and looked out the window at the crisp, fall sky. The temperature sign across the street flashed “40 DEGREES AT 9:23 AM.”

EXHIBIT 1

Note from Tom Burns

John,
I got the data on the gasket failures from Paul. We have run 24 races this season with temperatures at race time ranging from 53 to 82 degrees. Paul had a good idea in suggesting we look into this, but as you can see, this is not our problem. I tested the data for a correlation between temperature and gasket failures and found no relationship.

Relationship between Temperatures and Gasket Failures²



In comparison with some of the other teams, we have done extremely well this season. We have finished 62.5% of the races, and when we finished we were in the top five 80% of the time. I am not happy with the engine problems, but I will take the four first-place finishes and 50% rate of finishing in the money³ over seven engines any day. If we continue to run like this, we will have our pick of sponsors.

Tom

NOTES: Each point is for a single race. A gasket may have multiple breaks, any of which may produce an engine failure. Also, the top five finishers in a race are “in the money”.