

Under New Management

THE PROBLEM HAD BECOME AN INDUSTRIAL NIGHTMARE: we just could not make two products critical to the entire Korean War effort, the F-5 autopilot and VGI vertical guidance indicator. The U.S. Air Force had several hundred new Sabre-Jets parked outside the aircraft plant in California and more being built every day, stuck in place and useless because of our plant's inability to produce and satisfy way overdue delivery promises.

These fighter aircraft were so fast that they could not be piloted without our F-5 autopilot and the VGI vertical gyro instrument. Our company, The Prince Corporation (all names disguised), was being blamed for grounding planes urgently needed for fighting the Korean War. There was no escaping the facts of our failure and its serious consequences. U.S. Air Force generals and top U.S. Defense Department officials flocked over our plant to try to determine what was wrong and get it fixed.

But we knew what was wrong and did not need their help. We just couldn't fix it. At least right away, because it was not just a simple fix. It was hundreds of problems.

Parts were being rejected because the tooling for making them was designed badly, sub-assemblies would not fit together, dimensions were in error, vendors were not able to deliver because the blueprints and specifications kept being changed, engineering change-orders were pouring into process designers by the dozens every day, and when an occasional product was finally assembled, it would not perform as designed and was rejected. It was a total, discouraging, disastrous mess.

We had a new product, a new plant, new machine tools, new employees, new processes, new production planning and control systems, and dozens of new managers. All this newness was because of an explosion of demand for the advanced, high-tech aeronautical products that our division of the Prince Corporation had proven ourselves to be highly capable of producing in the past.

Our very success led the U.S. Air Force, our key customer, to come to us and literally command us to double the size and capacity of our facility to produce the F-5 and the VGI, and under enormous time pressure. The products were so important that the U.S. Air Force wanted to set us up as a second source for these products, originally designed and sold to the U.S. Air Force by our number one competitor, the McAlpin Corp.

We did not want to accept this task, partly because it would be aiding our competitor to penetrate a market we had hitherto dominated, and partly because the products were still being designed and the schedules were clearly going to be virtually impossible to meet.

But the government applied heavy pressure, offered to provide us with all necessary machine tools, build a new building attached to our present building, and added a strong measure of patriotism. Our top management gave in, of course, and agreed to take on the project.

It was an exciting time, for we were to double the size of the plant, the number of machines and machinists, assembly workers, all support groups, such as quality control, production control, process engineering, and sales volumes. Very shortly after agreeing to accept this order, construction contracts were signed, concrete was poured within weeks, and a new management cadre was interviewed, and hirings began at a fast clip.

The F-5/VGI project was so big and our “regular” products were selling so well and expanding volumes continually that it was decided to set up the McAlpin Program, as it came to be called, as a separate organization in parallel with the “regular” organization. It was hoped that the McAlpin team would bring new ideas and systems which would benefit the whole Aero Division. The management team which was hired in from all over the country came with outstanding credentials and was selected with great care and intensive interviewing. As a result, while they were new to us “regulars,” they were clearly able and very impressive managers, and with excellent, relevant experience.

They went at their work with high spirits, cooperated with each other, and invested energy and ideas at a high rate. Amongst themselves they were often critical of the more conventional and less “advanced” system and management approaches used in the well established regular organization. Not surprisingly the two organizations

became (quietly at first and more openly later) competitive and ultimately defensive of their production systems and results.

But the results began to contrast as the McAlpin team ran into the massive problems described earlier, while the regular team set new records. Despite the new team's strong capabilities, efforts, and initially high morale, they could not produce F-5s and VGIs and a sense of emergency, crisis, and frustration soon set in. Six months of desperate efforts solved dozens of problems with the parts designs and processes. There weren't dozens of problems: there were hundreds and hundreds of problems. Hardly anything worked the first time, and the team worked harder and harder as nights and weekends became a normal pattern.

Top management, of course, pounced in, applying pressure and ideas. Plant Manager Henry Ellis, who himself had been hired from GE only several years before the McAlpin Project, began to criticize the new team (which had been reporting to him from the start). Managers in the regular organization who had been competing with the new group took pleasure in their failures. They pointed out to Ellis the mistakes the new managers were making, and shortly he fired several of the men who had been hired for the project.

A team was dispatched to visit the McAlpin plant to see how they were doing with the same new products. They found to their delight but also their disappointment that McAlpin could be of no help whatsoever. They were having the same massive, totally disastrous problems that we were having.

My job was as assistant to the plant manager. In this position I worked with both the old group and the new group. I came to respect many of the new managers and heard of their frustrations and complaints about the regular team's managers, systems, and attitudes. They felt that they had never been accepted as equals by the regular team's managers, and when cooperation in the use of facilities and workers was needed, it was often denied.

The alienation between the two groups grew worse as the new group slipped further and further behind in the schedule, and the nation's war-effort pressures intensified on the Prince Company.

After another few months of failure, Henry Ellis, with the concurrence of Lewis Trane, the operations manager over production and engineering to whom he reported, decided on a total reorganization of Aero Production. Each and every management function in the McAlpin organization would report to the head of that function in the regular organization. In effect, this abolished the separate McAlpin operation by placing it all under the old, regular team. The regulars, the old-timers had won. The competition was over.

The regulars were pleased and felt that their successes on the Prince products had been recognized and that the upstart outsiders had been shown to be less able than their outstanding resumes had promised.

In the McAlpin team the organizational change was terribly disappointing. Each man now had to report into an old, long established group; they lost their sense of independence and freedom to make decisions and innovate. Of about eight at the top of their group, five left Prince within several months. (Their top man stayed on, however, and accepted his new role with apparent grace and a cooperative spirit.)

The smug rejoicing of the regular team was short-lived. They, of course, now had to shoulder the responsibility for the F-5/VGI for the first time and at once became the culprits and management failures for the still disastrous project.

Ellis himself was in the worst position of all. Before, he could blame the inexperienced new McAlpin team and ask top management to give them more time to get things back on track. But now

that he had placed the project under his seasoned, regular, successful managers, he could not use that excuse for further failures.

Under this intensive spotlight, all the way up to the Pentagon and the White House, Ellis turned up the heat on himself and his people. He showed no panic or temper but got involved more personally in all parts and assembly problems. He demanded action, explanations, fixes, and results.

Among his subordinates the heat was on. They dug into every detail, isolating problems and causes and fixing more dozens of individual problems. The plant manager held meetings in his large office three times weekly for about three hours at a time with twenty to thirty managers in attendance, each prepared to explain what was being done on each problem. Generally the problems were identified by part numbers, and each meeting covered about a hundred parts.

Under all this pressure and the firings of some key people, some of the nine regular managers began to show their tempers, blame each other for the falldowns occurring, and try to defend themselves and their organizations in meetings and with Ellis.

Antagonisms were especially common between production control and parts manufacturing, and between quality control and assembly. Relationships were tense, and with some backbiting and blaming and complaining. With the long hours and sixty-hour work weeks and yet continued poor results, tempers grew short, and the spirit in the previously successful organization soured day by day.

Little by little a few of each set of products were completed, accepted, and shipped. But the numbers were tiny: where three hundred or more sets were needed, we were only producing about three a week and the rate of increase was not encouraging.

One day maintenance workers wheeled in a cart with a desk and installed it in the plant manager's office side by side with Ellis' desk. It was for the operations manager, his boss Lewis Trane, who immediately moved from his office an eighth of a mile away, to sit beside the plant manager. My office was next door, but I did not dare to walk into the plant manager's office, as I had always done. For two days Trane was present all day in everything that Ellis did.

On the third day I was way out in the plant checking on something for about an hour. When I returned to report to Henry Ellis, I stopped at his door before entering and looked through the window into his office. I saw to my amazement that the office was filled with the top twenty or so of our production management team. Ellis was not there. Mr. Trane was talking to the group assembled. He looked very serious.

It was obvious that Henry Ellis was gone, probably fired, and the managers were being given the news.

I hesitated about going in. My rank was appropriate to those inside, but I had apparently not been invited. Was I as Ellis' assistant getting fired too? Scary, but, of course, I could not go in, so I waited in my office for about fifteen minutes until the meeting was dismissed.

Then I learned that Ellis had been fired (I had been invited to the meeting, but the secretary had not been able to find me). I never saw Ellis again.

Mr. Trane had announced that the director of labor relations for the corporation, John Rind, would take Ellis' place as plant manager. Rind was about forty-eight, had been a successful plant manager at one of Prince's commercial product plants and had been promoted to run labor relations only about eighteen months before. It was considered that he was doing an excellent job. He had a reputation for being tough, firm, open, likeable, and smart in a practical way.

He also had a reputation for having a good sense of humor, but when he came to work the very next day after Trane's announcement, he looked very serious and was not smiling. He was clearly under the enormous pressure of taking charge of a major, broadly discussed bottleneck in the production of vital equipment for the Korean War. He had to succeed somehow where all his predecessors had failed. Most of us knew him, so introductions at his first meeting were very brief. He said little other than that he would sit down with each of us over the next few days and try to learn what was going on.

For ten days he never smiled. He spent his time interviewing the top eight managers in the plant plus engineering managers and men who had been dealing with McAlpin. In my interview he asked question after question but never indicated what he was learning or concluding. He thanked me for my conclusions and analysis. He spent at least two hours with each of us. On the tenth day he sent word to each of us to meet with him at 0800 the next morning.

We assembled around a table in his office. He was as serious and unsmiling as ever. It was very quiet. He then said that he had met at length with each of us. He told us that no one was to be transferred or fired. Instead, he said, he had never met a more competent and proficient group of production people, and each of us in our professional function was outstanding. He knew the problems we had were massive and difficult. He felt we could resolve them one by one and get those planes flying. But, he said, "you have not been working well together. You have not been a real team. There has been fear, defensiveness, mistrust, and hesitation at honest communication. If that goes on we will all fail. You will, we will, work as a team. No one will succeed unless we all succeed together. We will meet every morning around this table for thirty minutes or less to discuss and resolve to-

gether the key problems that are hurting us. Everyone will have a chance to speak up. We will work together. We will make decisions together. When we can't agree I will decide. But whatever we decide, we will then all be loyal and totally support that decision when we leave this room. *Is that clear?*"

It was dead quiet. He looked each of us in the eye one by one, all around the table. And we all said "yes." Then he smiled for the first time, and we left the room.

Well, we did begin to work as a team, to cooperate, trust, talk, listen. Part of it was, I'm sure, the fact that no one was going to be fired. We had nowhere to go but up, each of us. Part of it was the consciousness we all felt that cooperation and teamwork was fruitful and that's what our boss demanded. We liked him, respected him, and wanted to please him.

But it was still an exercise in solving hundreds and hundreds of manufacturing, engineering, and high-tech problems. The work pace and pressure continued at a nearly impossible level.

Readers:

Please pause for a moment before reading further. Ask yourself what do you think will happen? Will it just be the same? Or now a happier team though still struggling? Or will they solve those problems and get the planes flying?

Outcome:

After one month the products began to trickle out steadily. After two months we were producing a steady stream and had sixty planes flying. After three months the F-5s and the VGIs were pouring out of the plant, and the crisis was over. In one year we went from an annual sales rate of \$10 million to \$80 million.

Readers:

Now please pause again and consider some questions: How much of this ultimate success was due to John Rind? Was placing the operation "under new management" really necessary? Was Henry Ellis made the "scapegoat"? Did he have to be fired? Would this group of eight capable managers not have solved these problems soon anyway? What do you think?

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