A VECTORXPRO STORY

Close Enough

One great operator. Three years of small warnings. Told twice.

ACCOUNTABILITY · CLARITY · RESULTS

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A work of fiction. Hollister Steel Products and every person in this story are invented.

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CHAPTER 1

Twenty-Two Years

Mitch

Twenty-eight months before

You could hear a press think, if you'd stood next to it long enough.

Mitch Halvorsen had stood next to Line 4 at Hollister Steel Products for most of twenty-two years. It was a 400-ton mechanical press that turned flat coils of steel into the side panels of shelving units, the kind that end up in a stockroom or a garage or the back of a hardware store. When the die was set right, it made a sound like a heavy door closing, once every three seconds, all shift. When something was about to go wrong, the sound changed half a beat before it did. Mitch could hear the half beat. Most people couldn't. That was why, when a die wouldn't sit or a jam wouldn't clear on any of the eight lines, somebody walked to Line 4 and got Mitch.

On a Tuesday morning in April, he was setting the die for a run of locker doors. The setup sheet was taped to the press frame, printed small, and Mitch's eyes weren't what they had been at thirty. He pushed his safety glasses up onto his forehead to read it. He always did. The glasses had a smudge in the lower left corner that he'd been meaning to clean for about a year, and reading through it gave him a headache.

He read the sheet, adjusted the shut height, and ran a test hit without pulling the glasses back down. It was one hit. He was standing to the side. He knew where everything would go.

The blank had a burr on one edge from the slitter, the kind of thing nobody upstream would ever notice. When the die closed, the burr sheared off, and a sliver of steel about the size of an eyelash came out of the die sideways at a speed nobody would ever measure.

It hit him a quarter inch above his right eye.

He felt it like a bee sting, and then he felt the warm line of blood start down toward his eyebrow. He put his sleeve to it.

Marty Kowal, running Line 5 next to him, had seen it. "You okay?"

Mitch pulled his sleeve away and looked at it. A thin red stripe on the gray cotton. Not much.

"Close," Mitch said, and grinned. "But I'm good."

"That was your eye, man."

"That was my eyebrow." He found a shop rag in his back pocket, pressed it to the cut for a minute, and checked it again. Stopped. He pulled his glasses back down and finished the setup. After ten minutes, without thinking about it, he pushed them back up to read the sheet again.

There was a poster by the time clock that Renee from safety had put up the year before. A drawing of a pair of eyes, and under it: *You only get two.* Mitch walked past it twice a day. He agreed with it, the way you agree with a sign that says to buckle your seat belt. It was good advice. It was advice for the new guys, the temps, the kids who stood in the wrong place because they didn't know yet where the wrong place was.

Mitch knew where the wrong place was. That was the whole point of twenty-two years.

He had never had a recordable injury. Not one. Not a stitch, not a day of restricted duty, not a trip to the clinic. There was a list of names in the front office of people who'd hit milestones without a recordable, and his name had been on it longer than anybody's. He was proud of that, quietly. He didn't think of it as luck. He thought of it as paying attention. He knew where his hands were. He knew where the pinch points were on every line in the building, because he'd helped set half of them up. He watched the ram. He listened for the half beat.

And the glasses, honestly, were for flying chips, and he stood to the side of the die. He'd stood to the side of the die for twenty-two years, and the one time something got him, it had found his eyebrow. If anything, that proved his point.

At lunch, Marty told the story at the break table, and it got bigger the way stories do. By the end of it the sliver was the size of a nail and had missed his eye by a hair. Mitch let him tell it. A couple of the younger guys looked at him with something like respect.

That night, Joanie saw the cut when he came in.

"What did you do?"

"Nothing. Little piece of steel. It's fine."

She tipped his head toward the kitchen light and looked at it, the way she had looked at a hundred small cuts and burns over twenty-six years of marriage. "Were you wearing your glasses?"

"Mostly."

She gave him the look. He kissed her forehead to end the conversation, and it worked, because it usually did.

Then Kayla called, their daughter, the youngest, and the kitchen filled up with a different kind of noise. She was engaged. She'd been engaged for three weeks, and she

called every other night with a new idea about the wedding: a barn, a church, her grandmother's church, October, definitely October, two years from now, because they wanted to save for a house first.

"Dad's walking me down the aisle, right?" she said on speaker, laughing. "You're not going to cry, are you?"

"I never cry," Mitch said, and Joanie snorted from the stove.

He went to bed that night with a small sting over his right eye and a picture in his head of a church in October. He didn't think about the sliver again. There was nothing to think about. It had been close, and he was good.

He had been saying that for twenty-two years. It had been true every time.

CHAPTER 2

The Walk

Renee

Twenty-three months before

Renee Szabo was the entire safety department at Hollister Steel Products. She had an office the size of a parking space next to the nurse's station, a desk phone, a laptop, a filing cabinet with a broken bottom drawer, and responsibility for the health and safety of three hundred and fifty people across two shifts and eight press lines.

She also had the OSHA log, the forklift certifications, the hazardous waste manifests, the stormwater permit, the hearing tests, the respirator fit tests, the ergonomics complaints, the new-hire orientations, the annual training for everyone, the insurance carrier's questionnaires, and, because she'd once mentioned she knew how, the plant's first-aid kits. She ordered the bandages herself.

Once a month, she walked the floor.

She took a clipboard and a printed checklist she had built herself from three different templates. She started at receiving and went line by line to shipping, and it took about two and a half hours if nobody stopped her, which somebody always did. It was the best part of her month. On the walk she wasn't filling in a form for someone else. She was looking at the actual plant, the real thing, the floor where people could actually get hurt.

In September she got to Line 4 at about ten.

Mitch Halvorsen was running a job, his safety glasses up on his forehead like a pair of sunglasses at the beach.

"Mitch," she said, and pointed at her own eyes.

He grinned and pulled them down. "Yes, ma'am." She'd seen him do it a dozen times. She'd seen him push them back up a dozen times, as soon as she turned the corner. Everybody liked Mitch, including Renee. He was the guy who showed new people where to stand. He just didn't seem to think the rules were written for him.

She wrote it down anyway. *L4: operator eye protection not worn (coached).*

She walked around the press. The fixed guard over the transfer, where finished panels slid out of the die onto the conveyor, was held on with one bolt. The guard had four bolt holes. Three of them were empty. Somebody had taken the guard off to clear

something and put it back with whatever was in their pocket.

L4: transfer guard secured by 1 of 4 bolts.

Then the light curtain. It was a pair of tall yellow posts on either side of the opening to the die area, throwing an invisible fence of infrared beams across it. If anything broke a beam while the press was running, an arm, a hand, a sleeve, the press stopped. It was the single most important piece of safety equipment on the line.

"That thing still tripping?" she asked.

"Every time a scrap slug bounces," Mitch said. "Ten, twelve times a shift. Costs us a couple minutes every time."

Marty, from Line 5, leaned over. "It'd trip if a moth flew through it."

L4: light curtain nuisance trips, 10–12/shift. Maint. to check alignment/sensitivity.

She finished the walk by half past twelve. Twenty-three items. An eyewash station on Line 7 blocked by a pallet of brackets. A fire extinguisher two months past its inspection. A forklift with a cracked mirror. A puddle of hydraulic oil by Line 2 that someone had covered with floor dry instead of fixing the leak. The usual. Some of it was new. A lot of it wasn't.

Back in her office, she typed the list into an email to the supervisors, the maintenance manager and Art Mulvaney, the plant manager. *September safety walk: 23 items. Please review the items for your areas and let me know when they're addressed.* She attached a scan of the clipboard pages.

Then she three-hole-punched the pages and put them in a binder on the shelf behind her desk. The binder said SAFETY WALKS on the spine in black marker. It held eleven months of pages. It was getting fat.

Over the next week, people answered. The Line 7 supervisor moved the pallet the same day, and sent a photo, which Renee appreciated more than he would ever know. The forklift mirror got replaced. Maintenance wrote back about the extinguisher. The rest didn't get an answer, which didn't necessarily mean they hadn't been fixed. It meant she didn't know.

She meant to follow up. She had a note on her desk that said *follow up walk items* in her own handwriting. But then the quarterly OSHA numbers were due to corporate, and a forklift clipped a rack in the warehouse and she spent two days on that report, and then it was time for annual training again, three hundred and fifty people, forty-five minutes each, in groups of twelve.

In October she walked the floor again. On Line 4, the transfer guard was held on with one bolt. Mitch's glasses were on his forehead. The light curtain was tripping on scrap.

She wrote them down again. This time she wrote a small *R* next to each one, for repeat. She'd started doing that a few months ago, so she could see the pattern.

By December there were a lot of R's.

She noticed it one evening, flipping through the binder after everyone had gone home. Page after page of the same items, month after month, in her own handwriting. Not hidden. Not ignored, exactly. Seen, every month, by the person whose whole job was seeing them, and written down, and sent to the right people, and filed.

The binder felt like a record. It looked like a safety program. Anyone from corporate could open it and see a walk every month, a list every month, an email every month.

What it actually was, Renee thought, was a very careful list of things everybody had already seen.

She didn't know what to do about that. There was one of her. There were three hundred and fifty of them, and eight press lines, and a binder she couldn't make anyone else read.

She put it back on the shelf and turned off the light.

CHAPTER 3

Rate

Carla

Fourteen months before

The order came in on a Monday in June: forty thousand shelving units for a national home-improvement chain, split across eight distribution centers, first trucks due in three weeks. It was the biggest single order Hollister had landed in six years. Art announced it at the all-hands meeting, and people clapped, and Carla Benning, the second shift supervisor, did the math in her head while everyone else was still clapping.

The side panels for every one of those units ran on Line 4.

Line 4 would run ten hours a shift instead of eight. Saturdays until the order shipped. And it would need to hit rate every hour of every shift, which it almost never did, because of the light curtain.

Carla had a crew she trusted. Mitch on setup, the best operator in the building. Marty next door. A couple of steady guys on the second press and the stacker. They knew the job. What they couldn't do was stop the light curtain from tripping every time a scrap slug bounced through the beams. Twelve trips a shift. Every trip stopped the press, and every restart took two minutes: clear the fault, check the die, reset, start. Twenty-five minutes a shift, gone, on a job where every minute was a panel.

On Tuesday she caught Kyle Ostrander, the second shift maintenance tech, at the coffee machine.

"I need you to fix the trips on 4," she said. "For real this time. We can't lose half an hour a shift on this order."

Kyle had looked at the light curtain three times in the past year. He went out to the line and looked at it again, with a meter this time, and came back to her desk an hour later.

"Alignment's fine," he said. "It's the receiver. It's old, and it's getting touchy. That's why the scrap trips it. A new one's four hundred and twelve bucks."

"Order it."

"I did. Three weeks. Maybe longer, the supplier said they're backordered."

Three weeks was the whole order. Carla looked at him.

Kyle was a good tech. He was the kind of guy who stayed late to finish a job, and he cared about the people on the floor. He thought about it for a second.

"I can jumper it out," he said. "Temporarily. Put a jumper across the safety relay so the curtain doesn't stop the press. Just till the new receiver comes in. The guys know to keep their hands out of the die anyway."

Carla knew what he was saying. She didn't love it. But she thought about the order, and Art's face at the all-hands, and the trucks in three weeks, and her crew, who were the best crew in the building and who did not put their hands in running presses.

"Temporarily," she said.

"Couple of weeks. I'll tag it."

He installed the jumper at the end of the shift. He hung a yellow tag on the light curtain post, filled out in neat block letters: *TEMPORARY. LIGHT CURTAIN BYPASSED. KEEP HANDS OUT OF DIE AREA. REPLACEMENT ON ORDER. K.O. 6/14.* In the maintenance system, he opened a work order, *Replace L4 light curtain receiver*, and set the status to *Waiting on parts*.

At the pre-shift huddle the next afternoon, Carla told the crew. "Light curtain on 4 is jumpered till the new part comes in. That means it won't stop the press. Keep your hands out of there. If something jams, you stop the line and you call me."

Mitch nodded. Everybody nodded. They'd all heard the same thing in a hundred huddles.

And Line 4 ran. For the first time in a year, it ran a full shift without stopping on scrap. It hit rate the first night. It beat rate the second night. By the end of the week the second shift was ahead of first shift, which never happened, and the guys on the line were ribbing first shift about it, which Carla let them do because they'd earned it.

The order shipped on time. Every truck. The home-improvement chain sent an email to Art, and Art forwarded it to the whole plant with a note: *Great work, everyone. Especially second shift on Line 4.* Carla printed it and taped it to the board by the line.

The new receiver came in five weeks later, in late July.

It arrived the same week Kyle took his vacation, a fishing trip in Minnesota he'd been planning for two years. The receiving clerk put the box on the shelf in the maintenance crib, in the bin with the work order number written on it in marker, the way she always did. The work order in the system still said *Waiting on parts*, because nobody updates a work order when a box arrives. You update it when somebody does the work.

Kyle came back from Minnesota to a backed-up list: a hydraulic pump on Line 2, a conveyor motor on Line 6, a press brake that had been down for four days. The light curtain on Line 4 wasn't on the list of things that were broken. It was on the list of things that were working fine. The press wasn't stopping anymore. Nobody was calling about it.

Carla didn't think about it again, either, not really. That was the strange part, when she tried to explain it later. She hadn't decided to leave the jumper in. She hadn't decided anything. The light curtain had been the biggest headache on her line for a year, and then one day it wasn't. And a problem that stops bothering you stops feeling like a problem. It just becomes the way the line runs.

The yellow tag hung on the post, in the light from the skylight, fading a little more every week. By fall, you could still read *TEMPORARY* if you knew it was there.

Nobody looked.

CHAPTER 4

The Kid

Josh

Twelve months before

Josh Ferrell had been at Hollister for two years, running the stacker at the end of Line 6, when Carla moved him to Line 4 in August to learn setup from Mitch Halvorsen.

It felt like getting called up from the minors. Everybody knew who Mitch was. Mitch was the guy the other setup guys called. Mitch could hear a die going bad before the parts showed it. Mitch had twenty-three years and zero recordables, and his name was at the top of the list in the front office, and on Line 4 people did things the way Mitch did them, because Mitch's way worked.

The first week, Josh mostly watched. The second week, Mitch let him run the press while he stood beside him with his arms folded, saying almost nothing, which Josh learned was Mitch's way of saying you're doing fine.

The third week, the transfer jammed.

It happened a few times a shift. A finished panel would come out of the die, slide onto the transfer conveyor, and catch its edge on the lip where the conveyor met the guide rail. The photo-eye at the end of the transfer would see the panel wasn't moving and stop the line. The press would halt at the top of its stroke and wait. And the moment the panel came free and the photo-eye saw it move again, the line would start back up on its own. That was by design. Somebody upstream had decided long ago that a line that restarted itself was a line that made rate.

Josh knew the procedure. He'd learned it at orientation, two years ago, in a conference room with a video and a quiz. You stopped the line. You went to the lockout board, hung your own lock on the press disconnect and the conveyor disconnect, and tried the start button to prove it was dead. You cleared the jam. You took your lock off and restarted. He even had his own lock, red, with his name on a tag. It was in his locker.

Mitch didn't do any of that.

Mitch walked to the transfer, looked at the jam for about two seconds, reached in with his right hand, gave the panel's edge a flick with two fingers, and pulled his hand back out. The panel slid free. The photo-eye saw it. The line started, the press came down, *thunk*, and it was running again before Josh had finished thinking the word

lockout.

"That's it?" Josh said.

"That's it." Mitch tapped his temple. "You just watch the ram. It's at the top, it's waiting on the eye. You flick it, you're out before the eye sees it move. Half a second. It's never once caught me."

"What about the light curtain?"

Mitch nodded at the yellow posts, and the faded tag hanging on one of them. "Jumpered since the big order. Doesn't matter. You're out before it would've tripped anyway. That's why you're quick."

Josh had a hundred questions he didn't ask, because asking felt like admitting he didn't get it. The procedure took five minutes, if you walked fast. Mitch's way took five seconds. Mitch had done it, by his own count, thousands of times. And here was the plain fact standing in front of him: twenty-three years, zero recordables. Whatever the video said, Mitch's way worked.

There was the way they taught you in the conference room, Josh decided, and there was the way the job actually got done. He was on Line 4 now. He was learning the real way.

In September, on a Thursday, with Mitch on break, the transfer jammed while Josh was running the press alone.

He walked over. He looked at the jam for two seconds, the way Mitch did. He reached in, flicked the edge of the panel with two fingers, and started to pull his hand back.

He was a quarter of a second slower than Mitch.

The panel slid, the eye saw it, the conveyor jerked forward, and the next panel's edge caught the tip of his middle finger against the guide rail. It didn't cut through the glove. It just pinched, hard, for a fraction of a second, and let go.

He yanked his hand back and shook it. Under the glove, the fingernail was already turning purple.

He stood there with his heart going like a hammer. Then he looked around. Nobody had seen it.

He thought about reporting it. He knew he was supposed to. But he thought about the board by the time clock that counted days without a recordable injury, and how it would go back to zero, and how everybody would know it was the new guy on Line 4. He thought about Carla's face. He thought about having to explain that he'd been clearing a jam without locking out, the way Mitch did, and what that would mean for Mitch.

Mostly he thought: Mitch never reports anything. Mitch never has to.

He wrapped the finger with electrical tape from the toolbox and went back to the press.

When Mitch came back from break, he saw the tape. He looked at it, and then at Josh, and Josh waited to get chewed out.

Instead, Mitch grinned. "Watched the eye instead of the ram, didn't you?"

Josh nodded.

"Everybody does that once." Mitch clapped him on the shoulder, not unkindly. "Faster next time, kid."

Josh lost the fingernail two weeks later. It grew back by Christmas.

He never told anyone how it happened. And he got faster, the way Mitch said. By November he could clear a jam on Line 4 in five seconds flat, hand in and out, without ever thinking about the red lock with his name on it, sitting in his locker, on top of his lunch.

CHAPTER 5

Close Call

Mitch

Nine months before

The plant was cold in November. The big dock doors opened every twenty minutes for a truck, and the wind came straight across the floor from the north, and by the second hour of second shift everybody on Line 4 had a layer on over their T-shirts. Mitch wore an old flannel shirt, red and black, cuffs unbuttoned because buttoned cuffs drove him crazy.

At about seven-fifteen the transfer jammed.

It was the most ordinary thing in the world. A panel caught its edge on the lip of the guide rail, the photo-eye saw it stall, the line stopped, and the press sat at the top of its stroke, waiting. Mitch walked over. Josh was at the stacker. Marty was running Line 5, ten feet away.

Mitch looked at the jam for two seconds. He reached in with his right hand and flicked the edge of the panel.

The panel came free. And in the same instant, the corner of it, with a little burr on it like a fishhook, caught the open cuff of his flannel shirt.

The eye saw the panel move. The line started.

The conveyor took the panel forward, and the panel took the cuff, and the cuff took his wrist, and for the first time in twenty-three years Mitch Halvorsen felt Line 4 pull on him instead of the other way around. It wasn't fast. That was the worst part, he'd think later. It was steady, the way a conveyor is steady, drawing his arm in toward the place where the panel met the guide rail, and his feet were sliding on the steel floor plate, and he couldn't get his other hand anywhere useful.

Then everything stopped.

Marty had seen it from Line 5. He had covered ten feet in what must have been about a second and a half and slapped the big red e-stop on the transfer with his whole palm. The line died. The conveyor stopped. Mitch's wrist was maybe eight inches from the guide rail.

For a moment, nobody said anything. The plant noise came back up around them, every other line still running.

Mitch pulled. The cuff tore with a ripping sound, and his arm came free, and he stepped back and looked at the torn flannel hanging off his wrist.

Then he laughed. It came out a little high.

"I had it," he said.

Marty was white. "You did not have it."

"I had it. I was about to get my other hand on the frame."

"Mitch. You did not have it." Marty's voice was shaking. "That light curtain's jumpered. If I wasn't standing right there—"

"But you were." Mitch clapped him on the arm. "Thanks, buddy. Seriously. I owe you a beer." He pulled the e-stop back out, reset the line, and it started back up. *Thunk.* Every three seconds. Like nothing had happened.

At break, Mitch saw Marty at the time clock with one of the yellow cards from the box Renee had put up last year. Near-miss cards. You were supposed to fill one out when something almost happened. Hardly anybody did.

"What are you writing?" Mitch said.

"What do you think?"

"Come on, Marty. Nobody got hurt."

"That's what it's for," Marty said. "The ones where nobody got hurt." He kept writing, in big careful letters. Mitch read it upside down. *L4 transfer. Operator sleeve caught clearing jam w/o lockout. Light curtain jumpered. Line restarted on its own. I hit e-stop. Arm 8" from pinch point.* At the bottom, after a second, Marty wrote Mitch's name, and then his own.

He folded it and pushed it through the slot in the box, and the box swallowed it.

Mitch let it go. Marty was a good guy, and he'd been scared, and people did things when they were scared. It wasn't a big deal. It was a card in a box.

That night, at home, he took the flannel shirt off and looked at the torn cuff for a while before he threw it in the trash. Joanie saw it and asked, and he said he'd caught it on a rack. She looked at him a second longer than usual.

He lay awake that night, which he almost never did. He felt it again, the pull. Not fast. Steady. His feet sliding.

He went over it the way he went over a bad setup. What went wrong? The cuff. The open cuff, catching the burr. That was it. It wasn't the flick. He'd done the flick ten thousand times. It was the shirt.

By morning he'd fixed it, in his own mind. He'd wear a tight sweatshirt instead of the flannel. Cuffs that fit. Problem solved.

He changed the shirt. He didn't change the way he cleared the jam. It didn't occur to him that there was anything else to change.

Kayla called on Sunday. They'd booked her grandmother's church for October 10, the following year. "Eleven months, Dad," she said. "You better start practicing the walk."

He told her he'd been practicing for twenty-five years.

The yellow card sat in Renee's box for six weeks. She was at corporate for safety training the first week, and then the quarterly numbers were due, and then it was the holidays. She opened the box on the second Monday of January and read Marty's card standing at the time clock, and felt something drop in her stomach.

CHAPTER 6

The Audit

Renee

Six months before

Renee did everything right with Marty's card. That was what she'd keep coming back to.

She read it at the time clock on the second Monday of January, and by ten o'clock she was in Carla's office with the card on the desk between them. Carla read it twice. She went quiet. That afternoon, Carla pulled Mitch aside at the start of second shift and told him, in plain words, that he was to lock out the line every time he cleared a jam, no exceptions, and that if she saw him reach into that transfer again he'd be written up.

"Yes, ma'am," Mitch said. "Won't happen again." He meant it, Carla said later. She believed he meant it.

Renee emailed the maintenance manager, Doug, about the light curtain. Doug answered the next morning: *Receiver was ordered last summer, WO open, will get it scheduled.* She filed the card, the email, and Doug's answer together in a folder labeled with the date. It was a good folder. It showed exactly what she'd done.

In February, the insurance carrier's loss-control auditor came for his annual visit.

His name was Glenn, and he'd been coming to Hollister for six years. He was a retired safety manager from a foundry, quiet, unhurried, with the habit of standing in one spot for a long time and just watching. Art Mulvaney walked with them, which he did once a year for the auditor and almost never otherwise.

On Line 4, Glenn stood in one spot for a long time.

Then he walked up to the yellow light curtain post and squinted at the faded tag. He read it out loud, slowly. "Temporary. Light curtain bypassed. K.O., six fourteen." He looked at Art. "June fourteenth?"

Art looked at Renee. Renee looked at the tag.

"That's eight months," Glenn said. He didn't raise his voice. He wrote in his notebook for what felt like a long time.

In his report, it was Finding 3 of 11, and it was the only one marked *Serious*: *Presence-sensing device on Press Line 4 bypassed since 6/14. Press operating without required point-of-operation safeguarding. Immediate correction required.*

Art took it hard, and to his credit, he took it seriously. He called Doug into his office the same afternoon. He told Glenn, in writing, that it would be corrected by the end of the month. Corporate had a spreadsheet for audit findings, a corrective action tracker with a row for each one: finding, owner, due date, status. Art typed the row for Finding 3 himself. *Owner: Maintenance. Due: 2/28.*

Doug went back to his office and looked it up. The work order was still open, *Waiting on parts*. But in the purchasing system, the receiver showed as received, back in July. The part was here. It had been here for seven months.

"Part's in the crib," Doug told Art the next morning. "I've got Kyle on it."

Art updated the tracker: *Part received; installation assigned.* And then, because corporate wanted serious findings closed before the carrier sent its follow-up letter, and because in that spreadsheet *Closed* had always meant *action taken*, he changed the status to *Closed.*

Nobody walked out to Line 4 to look.

Kyle didn't get to it that week. A press brake on Line 7 threw a hydraulic line, and he spent three nights on that. The following week, Doug moved the light curtain work order to first shift to balance the load, and the first shift tech didn't know the box was in the crib, and the work order said *Waiting on parts*, so he waited.

At the end of February, the plant got ready for the carrier's follow-up visit the way plants get ready for visits. A housekeeping push. Floors swept, pallets squared, old signs taken down. Somebody on the 6S crew, doing exactly what they'd been asked to do, pulled a faded, sun-bleached tag off a light curtain post on Line 4 because it looked bad, and threw it away.

The jumper stayed where it was, inside the control cabinet, behind a door with a latch.

From the outside, the light curtain looked normal. Two yellow posts. The little status lights on top glowed green, the way they were supposed to. The curtain itself worked fine. It saw everything. It just wasn't connected to anything anymore.

Renee did her March walk on a Wednesday. On Line 4, she stopped at the light curtain. No tag. Green lights. She thought about Glenn's finding, and the tracker that said *Closed*, and Doug saying Kyle was on it.

She checked the box on her clipboard. *L4 light curtain:* OK.

She almost walked over to the control cabinet. She thought about it. But the cabinet was maintenance's, and maintenance had closed it out, and she had sixty more items to check and a new-hire orientation at one. Opening another department's cabinet to double-check their work felt like saying she didn't trust them.

She moved on to Line 5.

It was, she would think for the rest of her life, the closest anyone came.

CHAPTER 7

Two Hundred Days

Art

Three months before

The counter by the time clock was a small electronic sign with red numbers, the kind banks use for interest rates. It read DAYS WITHOUT A RECORDABLE INJURY, and on a Thursday in May it turned over to 200.

Art Mulvaney had been plant manager at Hollister for nine years, and the counter had never reached 200 on his watch. He'd watched it climb to 140, then reset to zero over a forklift-clipped ankle. He'd watched it get to 170 and reset over a cut that needed four stitches. Two hundred felt like a summit.

He ordered pizza for both shifts. Somebody in the front office printed a banner that ran the length of the breakroom wall: 200 DAYS SAFE. THANK YOU, HOLLISTER. Art bought a new frame for the safety board by the time clock, and the supervisors voted, and the frame went up with a photo inside it: Mitch Halvorsen, standing in front of Line 4 with his arms folded and his safety glasses on, for once, because someone had told him it was for a picture.

Under the photo, a brass-colored plate: SAFETY CHAMPION. 24 YEARS WITHOUT A RECORDABLE INJURY.

At the second-shift pizza, Art gave a short speech. He was good at short speeches. He said that safety wasn't a department, it was everybody. He said that two hundred days didn't happen by accident, it happened because people looked out for each other. He said the plant was proud of every person in the room, and that he was going to make sure corporate heard about it. He meant all of it.

Then he raised a paper cup of soda toward the photo on the board. "And to Mitch," he said, "who's been showing us how it's done for twenty-four years."

People clapped. Mitch ducked his head and waved it off, red in the face, and somebody yelled "Speech!" and Mitch yelled back "Eat your pizza," and everybody laughed.

At the back of the room, Josh Ferrell clapped along with everyone else. Under the table, his thumb rubbed the middle fingernail on his right hand, the one that had grown back in a little ridged. Marty Kowal clapped twice and then picked up a slice and didn't

look at the photo.

Art didn't notice either of them. He was looking at the banner.

After the pizza, Renee caught him in the hallway outside the breakroom.

"Can I show you something?" she said, and handed him a sheet of paper. It was a count of near-miss cards by month for the past two years.

The first year there'd been twenty-six. This year, so far, there had been three.

"That's good, right?" Art said. "Fewer near misses."

"I don't think it's fewer near misses," Renee said. "I think it's fewer cards. People stopped writing them."

"Why would they stop?"

She didn't have a clean answer. She had a feeling. Marty's card was one of the three. It had sat in her box for six weeks, and when she finally read it, it had led to a conversation and a folder and nothing anybody on the floor could see. She suspected people noticed that. She suspected they'd decided writing a card was like dropping a letter down a well.

"I don't know," she said. "I just don't think it means we're safer."

Art looked at the sheet for a moment. He liked Renee, and he trusted her, and he also had a corporate review in June where the first slide would be the plant's recordable rate, and part of his bonus rode on it. Two hundred days. A closed audit finding. A safety walk every month, documented. A near-miss program, in place.

"Or," he said gently, "we're getting safer. It happens. Let's not talk ourselves out of a good thing."

He handed the sheet back. Renee took it, and nodded, and went back to her office, and put it in a folder.

That night, driving home, Art thought about the counter. He knew, the way any plant manager knows somewhere in the back of his head, that a number like that measured two things at once and couldn't tell you which. It measured people being careful. And it measured luck. On the board they looked exactly the same. Two hundred days of good habits and two hundred days of near misses that happened to miss both came out as the same red number by the time clock.

He didn't let himself follow that thought very far. It was a good day. People had worked hard for it.

The next morning the counter turned to 201.

On Line 4, at the start of second shift, the transfer jammed, and Mitch Halvorsen walked over to clear it, under his own photograph.

CHAPTER 8

The Lock on the Board

Mitch

Four weeks before

After Carla talked to him in January, Mitch locked out every time. He did it for almost three weeks.

He'd meant it when he said it. He'd seen Marty's face at the e-stop, and he'd lain awake that night feeling the pull of the conveyor on his wrist, and he wasn't a fool. So when the transfer jammed, he stopped the line, walked the forty feet to the lockout board, took down his lock, walked to the disconnects, hung it, walked back, tried the start button, cleared the jam, walked back, took his lock off, walked back to the press, and restarted.

Four minutes, give or take. Six or seven jams a shift.

By the end of the second week he had done the math without meaning to, the way he did math on everything. Four minutes a jam, six jams a shift, five shifts a week. Two hours a week of Line 4 standing still, waiting on him to walk back and forth. On a line that ran the side panels for every unit in the building.

Nobody said anything about it. Carla didn't come by to check. Nobody came by to check. The board by the line showed rate, and for three weeks, second shift's rate on Line 4 was the lowest it had been in a year.

One night in February, the transfer jammed with forty minutes left in the shift and a truck at the dock, and Mitch looked at the jam for two seconds, and looked at the board forty feet away, and reached in and flicked it.

It cleared. His hand was out before the line moved. Of course it was.

After that, it was the old way again, more or less. He told himself it was different now. He wore the tight gray sweatshirt with the knit cuffs instead of the flannel. He kept his glasses on most of the time. He only flicked the easy ones, the clean jams where he could see the edge. The ugly jams, the ones where a panel folded up in the transfer, he locked out. Mostly.

He wasn't being reckless. That was what he would have said, if anyone had asked. He was the most careful man on that line. He was being efficient, and he was very, very good at it, and twenty-four years without a recordable said so in brass, on the board by

the time clock, under his own picture.

His lock hung on the lockout board, red, with a white tag that said HALVORSEN in his own block letters. It was clean. It had a thin layer of the fine gray dust that settles on everything in a press plant, the kind you only see on things nobody touches. He used it for die changes, when maintenance was in the press and the rules were the rules. The rest of the time it just hung there.

In July he turned fifty-five.

He didn't think about it much. He noticed, the way you notice weather, that his right shoulder ached in the mornings now, and that the half beat he'd always heard in Line 4 felt more like a whole beat lately. He noticed his reading glasses had moved from the kitchen drawer to his shirt pocket. He didn't connect any of it to the flick. The flick was the flick. He'd done it for twenty years.

At home, Joanie found a bandage on his left hand one Sunday morning, a scrape across two knuckles.

"What's this one?"

"Bracket. Nothing."

"Mitch."

"Nothing. I promise." And then, because he knew how to end a conversation with his wife after twenty-eight years: "Did Kayla pick the song yet?"

She had. They both knew it already. It was the song he used to sing to her in the car when she was little, badly, with the windows down. Joanie had signed the two of them up for dance lessons on Saturday mornings at the community center, so he wouldn't step on Kayla's dress in front of a hundred and forty people. He grumbled about it every week and wouldn't have missed one for anything.

That Saturday, in a gym that smelled like floor wax, an instructor half his age counted out the steps while Joanie led, because he kept forgetting. "You're thinking about it too hard," Joanie said. "Just listen to the music."

"I listen to presses," he said. "Music's harder."

She laughed, and he got it right, finally, three times in a row, and she put her head against his chest for a second in the middle of the gym like they were the only people there.

On the drive home she said, out of nowhere, "You're being careful at work, right? Really careful?"

"I'm always careful."

"I know you think you are."

He reached over and took her hand. "Ten weeks," he said. "October tenth. I'm walking her down that aisle, and I'm not stepping on anybody."

She squeezed his hand and didn't say anything else.

On Monday, at the start of second shift, Mitch walked past the lockout board on his way to Line 4. His lock hung where it always hung, red, clean, dusty, with his name on it.

He didn't look at it. There was no reason to. He'd know where it was if he needed it.

CHAPTER 9

Friday

Carla

The last day

The last Friday in August was hot inside the plant, the kind of heat that sits under the roof all week and doesn't leave at night. Second shift ran three-thirty to midnight. By ten o'clock, the big fans at the ends of the aisles were just moving the hot air around, and everybody on Line 4 had their sleeves pushed up.

There was a truck at Dock 3.

It had been there since nine. A regional retailer needed two hundred shelving units at a store opening on Monday, and somebody in sales had promised them, and the panels were the last thing short. The driver had already called his dispatcher twice. The shipping lead had come to find Carla twice. Carla had told him both times: an hour. Line 4's almost there.

Line 4 was not almost there. The coil they were running had a slight crown to it, and the panels were coming out of the die with a little twist, and the transfer was jamming every fifteen minutes instead of every hour. Not the easy jams. The ugly ones, where a panel came out cocked and folded its corner against the guide rail.

Mitch had locked out for the first two. Carla saw him do it, and felt good about it, and went back to her paperwork.

At eleven-forty, the shipping lead came a third time. The driver was going to leave at midnight with or without the panels. He was out of hours.

Carla walked out to Line 4. The line was stopped. Another jam. A panel was folded against the guide rail at a bad angle, the corner wedged under the lip.

Mitch was standing in front of it with his hands on his hips, looking at it.

"How many more?" Carla asked.

"Forty-one," Josh said from the stacker.

Carla looked at the clock on the wall. Eleven forty-four.

"Can we get it running?" she said. "He's been sitting out there three hours."

She'd say later, in a small room with an investigator, that she had asked that question a thousand times in her career. It was the most ordinary question a supervisor asks. She never once meant *skip the lockout*. She never had to mean it. She'd said, at a huddle

fourteen months earlier, *if something jams, you stop the line and you call me*. And then she had walked over to a stopped line, at eleven forty-four on a Friday with a truck waiting, and asked if they could get it running.

"Give me a minute," Mitch said.

He looked at the board, forty feet away, and at the clock, and at the jam. Carla turned away to get her radio off her belt to tell the dock. That was all. She turned her head.

Josh saw it. He would tell it the same way every time, for years, in the same flat voice.

Mitch reached in with his right arm, farther than he did for the easy ones, past the wrist, almost to the elbow, to work the folded corner out from under the lip. He had to lean in to get the angle. He got his fingers under the edge. He pulled.

The panel came free all at once.

The photo-eye saw it move. The line did what it had been built to do, what it had done every time anyone cleared a jam on Line 4 for twelve years: it started.

The light curtain saw Mitch's arm in the die area. It did exactly what it had been built to do too. It sent its signal to stop the press.

The signal went to a relay that had been jumpered for fourteen months.

Carla heard the sound change. She would never be able to describe it. It was the half beat. The one Mitch had always heard and nobody else could. Then Josh was screaming, and Marty was there from Line 5, slamming the e-stop with both hands, too late, and the line was dead, and the plant noise kept going all around them as if nothing had happened.

She would not remember the next minutes in order. She would remember her knees on the steel floor plate. She would remember shouting into the radio for 911, and the dock lead's voice coming back confused. She would remember Josh, standing at the stacker, not moving, holding his own right hand with his left. She would remember holding Mitch's other hand, the left one, with the scrape across two knuckles, and saying his name, and saying it again.

She would remember that his eyes found hers for a moment, and that he looked surprised. Not afraid. Surprised. As if Line 4 had done something it had never done before.

The paramedics came at 11:58. The plant was quiet by then. Somebody had shut down every line in the building, and in the silence you could hear the big fans turning, and a truck idling at Dock 3.

At 12:31 a.m., at the hospital in town, a doctor came out to the hallway where Carla and Art were standing, and they knew before she said anything.

Back on Line 4, in the empty plant, the two yellow posts of the light curtain still glowed green on top, the way they were supposed to.

CHAPTER 10

The Phone Call

Art

That night, and after

There is a policy for this. Art Mulvaney had read it once, years ago, in a corporate binder, and hoped never to open it again. It said a member of plant leadership should notify the family in person, as soon as possible, accompanied if possible.

He drove there alone at a quarter past one in the morning, because Carla couldn't stop shaking and Renee was still at the plant with the sheriff's deputy, and because, he decided somewhere on the dark county road, it should be him.

The Halvorsens lived in a white ranch house on the edge of town with a basketball hoop over the garage that nobody had used in ten years. The porch light was on. Mitch always got home around twelve-thirty, and Joanie always left it on for him.

She opened the door before he knocked. She was in a robe, and she had her phone in her hand, and she had been about to call Mitch to ask why he was late.

She looked at Art's face, and then at the empty driveway behind him where Mitch's truck should have been, and she put her hand on the door frame.

Art said it the way the policy said to say it. Plainly. Without hope that wasn't there. He had practiced the words in the car and they came out wrong anyway, and it didn't matter, because she had understood before he opened his mouth.

She didn't scream. She said, "No," once, very quietly, as if correcting a mistake on a form. Then she sat down on the top step of her own porch in her robe, and Art sat down beside her, and they stayed there until Kayla's car came up the street twenty minutes later, fast, with the headlights on high.

Art would remember Kayla's voice for the rest of his life. He would not remember anything he said.

The investigation started on Monday.

The state OSHA inspector arrived at seven. Corporate sent its EHS director and a lawyer. The insurance carrier sent Glenn, who walked to Line 4 without being shown the way and stood in front of the light curtain posts for a long time before he said anything at all.

It took them less than a day to find it. It wasn't hidden. That was the thing that Art would never get past. None of it had ever been hidden.

They opened the control cabinet and found the jumper across the safety relay, neatly installed, exactly where Kyle had put it fourteen months earlier.

They found Kyle's work order in the maintenance system, *Replace L4 light curtain receiver*, opened in June of the year before, status *Waiting on parts*.

They found the part. It was in the maintenance crib, in a bin with the work order number written on it in marker, still in its box, still sealed. The invoice was taped to the side. Four hundred and twelve dollars.

They found Renee's binder, with the light curtain written in her handwriting on page after page, and a small *R* beside it, month after month.

They found Marty's yellow card, in a folder dated January, with Mitch's name at the bottom.

They found Glenn's finding from February, *Serious*, and the corrective action tracker with a row for Finding 3, *Owner: Maintenance*, status *Closed*.

They found Mitch's lock on the lockout board, red, clean, with a thin gray film of dust on it.

And they found Josh, who sat across a table from the inspector on Tuesday and told her everything, in a flat, steady voice, without being asked twice. How Mitch cleared jams. How Mitch had taught him. How he'd lost a fingernail a year ago doing the same thing and never reported it. He held up the finger. The nail had grown back with a ridge in it.

On Wednesday, Art went into the maintenance crib alone and took the box down from the shelf.

He held it for a while. It was light. You could carry it in one hand. Inside was a small gray sensor that would have taken Kyle about forty minutes to install.

He tried to find the person who had done this. He'd been trying since the porch. He went through them one at a time, and every one of them was someone he would have hired again. Kyle, who stayed late to finish jobs, who had meant to install it. Carla, who ran the best shift in the building, who had told her crew to stop and call her. Renee, who had written it down every single month. Doug, who had told him the part was in. Marty, who had filled out the card. Josh, a kid who had done what the best man on the line showed him. Mitch, who had believed with his whole heart that he knew where his hands were.

And himself. Who had typed *Closed* into a spreadsheet. Who had looked at a sheet of paper from Renee and said *let's not talk ourselves out of a good thing*.

Everyone had seen it. Everyone had done something about it. A walk, a card, a tag, a work order, a finding, a phone call, an email, a conversation, a folder. All of it was real. None of it was finished. Nobody owned it all the way to the end. Every piece had been handed to the next person, or to a binder, or to next week, and the next person had been busy, and the press on Line 4 had kept running, and the light curtain had kept glowing green.

OSHA's citations came in October. Corporate's lawyers handled them. There would be a fine, and a lawsuit, and a settlement, and Art would sign things for two years. He found he couldn't feel any of it.

On the Thursday after it happened, he walked out to the time clock early, before first shift, and found that someone had already taken down the 200-days banner and reset the counter.

It read zero. He didn't know who had done it. He was grateful he hadn't had to.

The frame on the safety board was still there, with the photo of Mitch in front of Line 4, arms folded, glasses on, for once. *SAFETY CHAMPION.* Nobody could bring themselves to take it down. Art stood in front of it for a long time, the way Glenn stood in front of things, and then he went to his office and closed the door.

CHAPTER 11

What It Would Have Taken

Renee

September

Kyle installed the new receiver on the second of September. It took him thirty-eight minutes.

Renee stood beside him the whole time, because Art had asked her to, and because she needed to see it. Kyle opened the control cabinet, took out the jumper, and held it in his palm for a second: a short length of wire with a terminal on each end, nothing at all. Then he set it on top of the cabinet and didn't touch it again. He mounted the new receiver, aligned it, and tested it the way the manual said. Renee put her arm through the beams. The press stopped. She did it four more times at different heights, and it stopped every time.

Kyle packed up his tools without a word and walked out to the dock. She found him out there twenty minutes later, sitting on an overturned bucket, staring at the parking lot. She sat down on another bucket next to him. Neither of them said anything for a long time.

The next week, Art called her into his office. He had aged five years in a month.

"Build it," he said. "Whatever it should have been. Whatever you'd have built if you weren't one person with a clipboard. Tell me what it costs, and I'll get it."

She went back to her office and pulled the SAFETY WALKS binder off the shelf. She'd been asked to keep it for the lawyers. Before she boxed it up, she went through it one more time, page by page, and counted.

The Line 4 light curtain appeared thirty-one times. The transfer guard, twenty-two. Mitch's glasses, nineteen. Every one of them in her handwriting. Every one with a little *R*.

She made a list of what had gone wrong. Not who. What. It was shorter than she expected.

Things were seen and written down, but nobody owned them all the way to the end. The light curtain belonged to maintenance, and to second shift, and to safety, and to the plant manager, which meant it belonged to no one.

Things were closed before they were finished. *Closed* meant somebody had done something, not that the hazard was gone.

Temporary had no end date. A tag that said *temporary* lasted fourteen months.

Overdue didn't go anywhere. An open item could sit for a year, and the only person who knew was the person who had written it down.

Warnings went into boxes and binders and folders, places where only one person ever looked, and that person was too busy to look often enough.

Then she wrote down what would have fixed each one. She spent a week on it, and when she brought it to Art, it fit on one page.

Every finding gets one owner and a date. Every item from a walk, every near-miss card, every audit finding, every safety work order. One person's name, and a date that person agrees to. Not a department. A name.

Nothing is closed until someone else sees it. The owner fixes it and takes a photo. A different person, a supervisor, Renee, someone, looks at the fix in person and signs off. For a light curtain, that means someone puts their arm through the beam and watches the press stop.

Temporary means a date. Any bypass, any jumper, any temporary fix gets an owner and an end date, and it shows up on every walk, in red, until it's gone.

Overdue goes up the chain. Three days past due, the supervisor sees it. A week, Art sees it. Two weeks, corporate. Automatically, without anyone having to send an email.

Everyone can see the list. Not a binder on Renee's shelf. A screen in the breakroom with every open item, the owner, and how many days it's been open. If your name is on it, everybody knows. If you fixed it, everybody knows that too.

Near-miss cards get an answer within forty-eight hours. Posted where the person who wrote it can see it: what was found, who owns it, what was done.

Lockout gets checked, not assumed. On every walk, the supervisor looks at the lockout board and the lines and asks the question out loud: when was the last jam, and where was your lock?

Art read it twice. "What does it cost?"

Renee had done that math too. A screen for the breakroom. Some software, or a spreadsheet if they had to. An hour of each supervisor's time a week. Her time, which she'd been spending anyway, writing the same things down every month.

"Almost nothing," she said. "That's the part I can't get over. Almost none of it costs anything. It's just attention. Somebody's name next to every line, and somebody else checking before it's crossed off."

Art nodded for a while.

"It would have saved him," he said.

"Any one piece of it would have saved him," Renee said. "Any one."

They put it in. By October there was a screen in the breakroom. On the first day it showed sixty-three open items across the plant, each with a name and a date, and people stood in front of it reading their names in silence. Within a month it was down to nineteen. Carla changed the line she used at every huddle. *If it jams, it's locked out. If I ask whether we can get it running, the answer is: as soon as it's locked.* She said it every shift, and she meant it every time, and nobody in that plant ever laughed at it.

Renee put the binder in a cardboard box marked *LEGAL HOLD* and carried it down to the records room in the basement herself. She set it on a shelf among the other boxes and stood there in the fluorescent light for a minute.

Thirty-one times. Every month, someone had seen it. That had never been the problem.

CHAPTER 12

The Wedding

Josh

October

Kayla Halvorsen got married on October 10 in her grandmother's church, the way she'd always planned, on a cold, bright Saturday with the maples on the square gone orange.

Josh Ferrell sat in the last pew. He'd almost not come. He'd sat in his truck in the church parking lot for twenty minutes in a suit he'd bought for the funeral, trying to decide if he had any right to be there. Then Marty knocked on his window, in a suit of his own, and said, "Come on, kid," and walked in with him.

Half of second shift was there. Carla, in the third row from the back, with her husband. Kyle, by himself, at the end of a pew. Renee. Art and his wife, near the side door. They didn't sit together. Nobody quite knew how to.

When the music started, everyone stood and turned. Kayla came up the aisle in her dress with her mother's arm through hers. Joanie walked her the whole way, slowly, in step, with her chin up. Josh saw people in front of him reach for their wives' hands.

At the front, Joanie lifted Kayla's veil, kissed her, and handed her to the young man waiting there. Then she sat down in the front pew, beside an empty space that nobody filled.

The reception was at a VFW hall on the edge of town, with paper lanterns and a buffet and a DJ. Josh stayed in the back by the coffee urn. After dinner, the DJ said it was time for the father-daughter dance, and the room went very quiet. Josh didn't know what was going to happen. He didn't think anyone did.

The song started. It was an old one, something you'd hear on the radio in the car. Kayla stood alone in the middle of the floor for a few seconds.

Then Joanie got up from the head table and walked out to her daughter and took her hands, and the two of them danced. Joanie led. She was good at it. She looked like someone who had practiced, in a gym that smelled like floor wax, on Saturday mornings, with a man who kept forgetting the steps.

Josh went out to the parking lot before the song ended and sat in his truck until his hands stopped shaking.

On Monday he went back to Line 4.

He ran setup now. Carla had asked him in September if he wanted it, carefully, the way you ask something that might break a person. He'd said yes. He didn't know if it was the right reason. He thought maybe somebody who knew exactly how it happened should be the one standing there.

At about five o'clock, the transfer jammed. A panel cocked against the guide rail. An easy one. The kind you could clear in five seconds with a flick.

There was a new operator on Line 4, a kid named Andre, twenty years old, three weeks in, watching Josh the way Josh had watched Mitch.

Josh stopped the line. He walked the forty feet to the lockout board. His lock wasn't in his locker anymore. It hung on his belt, red, with his name on the white tag, and it was scratched now from use. He hung it on the press disconnect, and then on the conveyor disconnect. He walked back and pushed the start button to prove it was dead. Nothing happened. He reached in and cleared the jam. He walked back, took his lock off, walked back, and restarted.

Four minutes.

Andre watched the whole thing. "Does it jam a lot?" he asked.

"Six, seven times a shift."

"And you do that every time?"

"Every time."

Andre looked at the transfer, and Josh could see him doing the math the way Josh had done it at twenty-four, the way Mitch had done it for twenty years. Four minutes, six jams, five shifts.

"Couldn't you just—" Andre made a little flicking motion with two fingers.

Josh held up his right hand, so Andre could see the ridge in the middle fingernail. Then he pointed at the lockout board.

There was a row of hooks on it, one for every setup person and maintenance tech on second shift, each with a red lock and a white name tag. In the middle of the row, one hook was empty. The tag was gone. But if you stood close, in the right light, you could still see a faint clean outline on the board behind it, where a lock had hung untouched for years while the dust settled around it.

"That was the best operator this plant ever had," Josh said. "He could clear that jam faster than anybody alive. He did it ten thousand times."

Andre looked at the empty hook for a long moment.

"Every time," Josh said again. "You got four minutes. You always have four minutes."

Then he went back to the press, and Line 4 started up, *thunk*, once every three seconds, the sound of a heavy door closing, all shift.

Rewind

Twenty-three months before

September. The same plant, the same eight press lines, the same three hundred and fifty people. Line 4 is running locker doors. Mitch Halvorsen has his safety glasses up on his forehead like a pair of sunglasses at the beach. The light curtain is tripping every time a scrap slug bounces through it. The guard over the transfer is held on with one bolt.

Renee Szabo is walking the floor, the way she does once a month.

One thing is different. She isn't carrying a clipboard. She's carrying her phone. In the spring, after the counter by the time clock reset over a forklift-clipped ankle, Art had told her to stop writing findings on paper and start giving them to people.

So nothing she sees today goes into a binder. Everything she sees gets a photo, a name, and a date, before she walks away from it.

CHAPTER 13

The Walk, Again

Renee

Twenty-three months before

On Line 4, Renee pointed at her own eyes, and Mitch grinned and pulled his glasses down. "Yes, ma'am."

She took a picture of the glasses on his forehead before he got them all the way down, which made him laugh, and she typed while she talked. *L4: eye protection not worn. Owner: C. Benning (coaching). Recheck next walk.*

"You're putting me in the computer?" Mitch said.

"I'm putting your supervisor in the computer," she said. "You're just in the picture."

Then the guard over the transfer, held by one bolt of four. She took a picture of the empty holes and found the second shift lead, who was standing right there. "Can you get three bolts in this today?"

"Before break."

She typed it, with his name and today's date, and kept walking. Forty minutes later, her phone buzzed with a photo from him: four bolts. She walked back to look, because looking was the rule now. A fix wasn't done because someone said it was done. It was done when someone else saw it. She checked it off.

Then the light curtain.

"That thing still tripping?" she asked.

"Every time a slug bounces," Mitch said. "Ten, twelve times a shift."

This time she didn't write *maint. to check alignment* and walk away. She called Kyle Ostrander on the radio and waited until he came out to the line. She showed him the photo and the count.

"Who owns this?" she asked.

Kyle looked at it for a minute with his meter. "Receiver's getting old," he said. "It's touchy. That's why the scrap trips it. New one's four hundred and twelve bucks, couple weeks to get it."

"What date do you want on it?"

He thought about it honestly. "October 15. If the part shows up, I'll put it in the same day. And I can add a deflector plate so the slugs stop bouncing through the beam in the first place."

She typed it while he watched: *L4 light curtain nuisance trips. Owner: K. Ostrander. 10/15. Replace receiver, add scrap deflector.*

She finished the walk by half past twelve. Twenty-three items, the same as any month. But by the time she sat down in her office, every one of them already had a name and a date beside it, on a list that showed up on the screen in the breakroom between the shift schedule and the cafeteria menu.

People read it. That was the part she hadn't expected. They stood in front of it with their coffee, the way they stood in front of the Royals score. Mitch saw a photo of his own forehead on there, under Carla's name, and took a ribbing about it for a week. He wore his glasses a lot more that week. Not all the time. More.

The receiver came in on October 9. Kyle put it in on the tenth and bolted a deflector plate under the die exit, a piece of scrap steel he cut and bent himself in about an hour. Then he sent Renee a photo.

She walked out to Line 4 and put her arm through the beams, high and low, five times. The press stopped every time. She watched the line run for twenty minutes. No trips. She took her own picture and closed it.

That month, Line 4's light curtain tripped twice. The month after, once.

At the October walk, Mitch's glasses were on his face. At the November walk, they were up on his forehead again, and Renee took another picture, and the coaching item went back on the screen under Carla's name, red this time, because it was a repeat. Carla had a real conversation with him about it. Not a lecture. A conversation.

Mitch rolled his eyes at all of it, a little. Twenty-two years, and now his forehead was on television.

But his glasses were on, after that, more often than they had been in years. And Renee's binder, the one on the shelf with eleven months of handwritten pages in it, stopped getting fatter. She left it up there. She didn't need it anymore.

CHAPTER 14

Rate, Again

Carla

Fourteen months before

The order came in on a Monday in June: forty thousand shelving units for a national home-improvement chain, first trucks in three weeks. Art announced it at the all-hands, people clapped, and Carla Benning did the math in her head while they were still clapping.

The side panels for every one of those units ran on Line 4. Ten-hour shifts. Saturdays. Rate every hour.

She braced for the light curtain. Then she remembered there was nothing to brace for.

Line 4's curtain had tripped four times in the whole month of May. Kyle's deflector plate had done what he'd said it would, and the new receiver didn't jump at every flicker. Four stops in a month was nothing. Four stops was a rounding error.

On the first night of the order, Line 4 hit rate. On the second night, it beat rate. It wasn't because anybody had found a shortcut. It was because the line had stopped fighting itself eight months earlier, on a Thursday in October, when a maintenance tech put a date on a $412 part and kept it.

In the second week, a press brake on Line 7 started throwing a fault on its own light curtain. Different machine, different problem, the same kind of headache. The Line 7 operator came to Carla's desk with an idea.

"Kyle could jumper it out," he said. "Just till we ship. Everybody keeps their hands out anyway."

Carla thought about the order, and the trucks, and Art's face at the all-hands. She thought about it for exactly as long as it took to remember how temporary things worked now.

If Kyle jumpered anything, it went on the list. It got an owner and an end date. It showed up red on the screen in the breakroom, where every person in the building could see it, with Kyle's name and hers next to it. It showed up red on Renee's walk every month until it was gone. If it went past its date, it went to Art, and a week after that, to corporate. Nobody had ever told her she couldn't do it. But nobody was going to do it

quietly, either, and it turned out that quiet was most of what made a bad idea seem like a good one.

"No," she said. "Get Kyle to look at it tonight. If it's the receiver, we order the receiver. If we're short, I'll take it to Art."

Kyle looked at it that night. It wasn't the receiver. It was a loose connector on the emitter, vibrated half out of its socket. He fixed it in twenty minutes and sent Renee a photo, and she came out the next morning and broke the beam five times, and closed it.

The order shipped on time. Every truck. The home-improvement chain sent Art an email, and Art forwarded it to the whole plant: *Great work, everyone. Especially second shift on Line 4.* Carla printed it and taped it up by the line.

At the end of the order, Kyle went on his fishing trip to Minnesota. There was no box sitting in a bin in the maintenance crib waiting for him. There was nothing on Line 4 waiting for anyone.

Carla didn't think about the light curtain again that summer. That was the strange part, when she tried to explain it later to a supervisor from another plant who'd come to see how Hollister ran its walks. She hadn't decided anything heroic. There hadn't been a moment where she'd saved the day.

The problem had simply been fixed, by its owner, by the date he'd picked, and checked by someone who wasn't him, before it ever had the chance to become the way the line ran.

CHAPTER 15

The Kid, Again

Josh

Twelve months before

Josh Ferrell moved to Line 4 in August to learn setup from Mitch Halvorsen, and it still felt like getting called up from the minors.

The third week, the transfer jammed. A panel caught its edge on the guide rail. The photo-eye saw it stall, and the line stopped.

Mitch walked over, looked at it for two seconds, reached in with his right hand and flicked the edge of the panel with two fingers.

The panel came free. And the line didn't move.

Mitch's hand had broken the light curtain on the way in. The press had faulted, the conveyor had locked, and a red light on the control panel was blinking. Nothing on Line 4 was going anywhere until someone walked to the control station and reset it.

"Every time," Mitch grumbled, walking to the reset button. "Used to be you could flick it and go. Now the curtain catches you every time you put a hand in there."

"Isn't that what it's for?" Josh asked.

Mitch gave him a look, and then laughed. "Yeah, kid. That's what it's for." He hit the reset. "Still faster than walking to the board."

Josh did it Mitch's way for two weeks: flick, the curtain trips, walk to the reset, restart. It was faster than a full lockout, barely. It also meant, he started to notice, that every single time he cleared a jam, there was a moment when his hand was inside the transfer and the only thing between it and a moving line was a pair of yellow posts.

In September, on a Thursday, he reached in to flick a jam and the panel was wedged tighter than it looked. He had to push, and his hand went farther in than he meant it to, past the edge of the guide rail, into the spot where two panels meet on a moving conveyor.

The line was dead, faulted, red light blinking. It couldn't have moved. He knew that.

But he stood there with his hand in that spot and thought, very clearly: *if those posts weren't working, I wouldn't have a hand.*

He pulled it out. He looked at the yellow posts for a while.

At break, he took a yellow card from the box by the time clock and wrote on it. He didn't write Mitch's name. He wrote his own. *L4 transfer. Clearing jams by reaching in and letting the light curtain stop the line instead of locking out. My hand was in the pinch point today. If the curtain ever fails, somebody gets hurt. I was taught this way and I think we all do it.*

He almost didn't put it in the box. Then he did.

On Saturday afternoon, there was an answer on the screen in the breakroom, next to the shift schedule. It didn't have his name on it, which he was grateful for. It had his words, and under them:

> *Owner: C. Benning. Lockout retraining for all L4 operators, both shifts, by 9/25. Supervisors to check lockout on every walk. Thank you to whoever wrote this.*

Forty-one hours, from the box to the screen.

On Monday, Carla pulled the Line 4 crew together at the start of the shift, Mitch included, and walked them through lockout at the transfer. Not the video. The real press, the real board, the real disconnects. She timed it. Four minutes and ten seconds, start to finish. Then she said: "From now on, the curtain is the backup. Your lock is the plan."

Mitch didn't say anything during the training. Afterward, by the coffee machine, he looked at Josh.

"That card was you," he said. It wasn't a question.

Josh's stomach dropped. "Yeah."

Mitch looked at him for a long moment. Josh waited to find out what twenty-three years and zero recordables thought about a kid who'd put the way Mitch worked on a screen in the breakroom.

"Huh," Mitch said finally. He poured his coffee. "Probably should've been me."

That was all. But on Wednesday, when the transfer jammed, Josh watched Mitch stop the line, walk the forty feet to the lockout board, take down his red lock with HALVORSEN on the white tag, blow the dust off it, and hang it on the disconnect.

It was the first time Josh had ever seen him do it for a jam.

Josh's own lock came out of his locker that night and went on his belt. It stayed there.

The next month, on her walk, Renee stopped at the lockout board and asked Josh out loud, "Last jam on 4. Where was your lock?" He pointed at his belt, and then at the disconnect, where it had been twenty minutes earlier. She took a picture of the board and moved on.

She asked Mitch the same question the month after that. He pointed at the disconnect too. Most months, it was even true.

CHAPTER 16

Close Call, Again

Mitch

Nine months before

The plant was cold in November. Mitch wore the old red-and-black flannel over his T-shirt, cuffs unbuttoned, because buttoned cuffs drove him crazy.

At about seven-fifteen, with a truck at the dock and Carla's voice on the radio asking how close they were, the transfer jammed. An easy one. A panel caught on the lip, nothing folded. Mitch looked at it for two seconds and at the board forty feet away and thought, just this once, the way he hadn't thought in two months.

He reached in and flicked it.

The panel came free, and the corner of it, with a little burr on it like a fishhook, caught the open cuff of his flannel.

And nothing happened.

The light curtain had seen his arm the moment it went in. The press had faulted at the top of its stroke. The conveyor had locked. The red light on the control panel blinked. Mitch stood there with his arm in the transfer and his cuff hooked on the corner of a steel panel, and Line 4 didn't move an inch. It just waited, the way it had been built to wait, for him to take his arm out.

He unhooked the cuff with his other hand. It took a few seconds. He pulled his arm back and stood there and looked at it.

Marty had come over from Line 5, fast, the way you move when you see a sleeve where a sleeve shouldn't be. He stopped beside Mitch and looked at the cuff, and at the transfer, and at the red light.

"Huh," Marty said.

"Yeah," Mitch said.

Neither of them said what both of them were thinking, which was the thing every press guy over forty knows about lines that restart on their own. Mitch had cleared ten thousand jams on Line 4. For twelve years, the second that panel moved, the eye would have seen it and the line would have started, and the conveyor would have taken the panel, and the panel would have taken the cuff.

He had never once thought about it like that. Not once.

"I'm writing it up," Marty said.

Mitch nodded. "Yeah. You should."

Marty wrote the card at break. *L4 transfer. Operator sleeve caught on burr clearing jam without lockout. Light curtain held the line. Burr on panel edge.* Mitch watched him push it through the slot, and didn't say a word against it.

On Wednesday afternoon, there were two answers on the screen in the breakroom.

The first: *Owner: C. Benning. L4 lockout spot-checks every shift for 30 days.* Fair enough. He'd earned that.

The second one he didn't expect. *Owner: P. Hadley (slitting). Burrs on L4 blanks traced to worn slitter knives. Knives replaced 11/19. Burr check added to coil changeover. Verified R. Szabo 11/20.* There was a photo of a new set of knives on the slitter, and a photo of a panel edge, clean.

Mitch stood in front of the screen with his coffee for a long time.

The burr. The same burr, or its cousin. The one that had sheared off in April two years ago and nicked his eyebrow a quarter inch from his eye, while he laughed and said *close, but I'm good.* It had been coming off that slitter the whole time, on half the panels in the building, and nobody had ever traced it back, because nobody had ever written down a sliver that only got an eyebrow. Now somebody had. Now it was fixed, at the source, with a name and a date and a picture.

That night at home, he took the flannel off and looked at the cuff for a while. It wasn't even torn. He threw it in the trash anyway.

Joanie saw it there and raised an eyebrow, and he told her the truth, the whole thing, which surprised both of them. She sat down at the kitchen table.

"And the machine just stopped?" she said.

"It just stopped. Like it was waiting for me."

She was quiet for a while. "So what are you going to do?"

"Lock it out," he said. "Every time." And then, because he was being honest tonight: "I mostly have been. Not every time. Every time now."

On Sunday, Kayla called. They'd booked her grandmother's church for October 10, the following year. "Eleven months, Dad," she said. "You better start practicing the walk."

"I've been practicing for twenty-five years," he said, and Joanie, across the kitchen, didn't snort this time. She just looked at him.

On Monday, the transfer jammed at five-twenty. Mitch stopped the line, walked forty feet, took down his lock, and hung it. Four minutes. It felt slow. It was going to feel slow for a while, he figured. Maybe for the rest of his career.

He decided he could live with slow.

CHAPTER 17

Two Hundred Days, Again

Art

Three months before

On a Thursday in May, the counter by the time clock turned over to 200.

Art Mulvaney ordered pizza for both shifts, and somebody in the front office printed a banner for the breakroom wall: 200 DAYS SAFE. THANK YOU, HOLLISTER. The supervisors voted on who should go in the frame on the safety board.

They voted for Mitch Halvorsen. Twenty-four years, zero recordables.

Mitch came to Art's office the next morning, which he had done maybe twice in nine years.

"I don't want it," he said.

Art thought he was being modest. "You've earned it, Mitch."

"I've been lucky," Mitch said. "For about twenty of those years, I was lucky. I didn't know it. Put Marty up there. He's the one who wrote the card in November. And whoever wrote the one last September, about the jams on 4." He paused. "It was Josh. He won't tell you. But it was Josh."

Art looked at him for a long moment. Then he made a call to the front office.

The frame went up that afternoon with two photos in it: Marty Kowal, grinning, arms crossed in front of Line 5, and Josh Ferrell, looking like he wanted to be anywhere else. Under them, the plate said: SAFETY CHAMPIONS. THEY SPOKE UP.

After the second-shift pizza, Renee caught Art in the hallway and handed him a sheet of paper. It was a count of near-miss cards by month, for two years.

The first year there'd been twenty-six. This year, so far, there had been forty-one.

Art read it twice. A year ago, he knew, he'd have read that number as bad news. More near misses. Something going wrong. Corporate would have asked about it on the first slide of his review.

"People are writing them," he said.

"People are writing them because they get an answer," Renee said. "Every card gets an owner in two days, and it goes up on the screen. They can see something happen. So they keep writing."

"And the counter?"

"The counter's luck and habits mixed together," she said. "I can't separate them for you. But this," she tapped the sheet, "this one's not luck. This is people telling us what's about to happen while it's still cheap to fix."

Art nodded slowly. He took the sheet back to his office and put it in his deck for the corporate review in June, as the first slide, ahead of the recordable rate. Under it he typed one line: *We want this number to go up.*

In his short speech at the first-shift pizza that Friday, he said that safety wasn't a department, it was everybody, and that two hundred days hadn't happened by accident. Then he said something he'd never said before.

"Two hundred days doesn't mean nothing went wrong," he said. "Plenty went wrong. Forty-one times this year, somebody saw it go wrong and wrote it down, and somebody owned it, and somebody else checked it. That's why the number's up there. Thank you for every card. Keep writing them."

People clapped. At the back of the room, Mitch clapped along with everyone else, standing next to Josh, and when Art said *keep writing them*, Mitch elbowed the kid in the ribs and Josh turned red to his ears.

The next morning, the counter turned to 201.

On Line 4, at the start of second shift, the transfer jammed. Mitch Halvorsen stopped the line and walked to the lockout board, under a frame that didn't have his picture in it.

CHAPTER 18

October

Mitch

October 10

The last Friday in August came and went like any other Friday.

It was hot under the roof. There was a truck at Dock 3, and a coil with a crown in it, and the transfer on Line 4 jammed every fifteen minutes. At eleven forty-four, Carla came out and asked if they could get it running. Mitch said, "Soon as it's locked," and walked forty feet to the board, and Carla said, "I know, I know," and went to tell the driver ten more minutes. The truck left at twelve-fifteen with every panel on it. Mitch went home and found the porch light on, and Joanie asleep on the couch with the TV going, and he covered her with a blanket and went to bed.

He never knew what that night was supposed to be. Nobody ever does.

Kayla got married on October 10 in her grandmother's church, on a cold, bright Saturday with the maples on the square gone orange.

Mitch stood at the back of the church in a suit that was a little tight in the shoulders, with his daughter's arm through his. Through the doors he could see the whole church turned around in the pews, waiting. Half of second shift was out there. Carla and her husband. Marty, in a tie. Kyle. Renee. Art and his wife near the side door. Josh in the last pew, in a suit he'd bought for the occasion, looking like he'd rather be clearing a jam.

"Don't you dare cry," Kayla whispered.

"I never cry," Mitch whispered back.

The music started.

He walked her up the aisle, slowly, in step, the way he and Joanie had practiced on Saturday mornings in a gym that smelled like floor wax. He didn't look at the people in the pews. He looked at the front of the church, where a nervous young man was waiting, and he thought about a car with the windows down and a little girl in the back seat singing along, badly, to a song on the radio.

At the front, he lifted her veil and kissed her cheek. He put her hand in the young man's hand. Then he sat down in the front pew beside Joanie, who took his hand and held it hard, and neither of them looked at the other for a while, because they both knew what would happen if they did.

The reception was at the VFW hall on the edge of town, with paper lanterns and a buffet and a DJ. After dinner, the DJ said it was time for the father-daughter dance, and the room went quiet.

The song started. The old one. The one from the car.

Mitch walked out to the middle of the floor and took his daughter's hands.

He counted the way the instructor had taught him. He listened to the music instead of thinking about it, the way Joanie kept telling him to. He led, for once. He did not step on the dress. Not once. Halfway through, Kayla put her head against his chest, and he looked over her shoulder at the head table and saw Joanie with both hands over her mouth.

At the back of the room, near the coffee urn, Josh was standing with Marty, watching. Marty put a hand on Josh's shoulder and left it there.

When the song ended, Kayla looked up at him. Her mascara had given up.

"You cried," she said. "Dad. You cried."

Mitch wiped his eyes with the heel of his hand and grinned at her, the same grin he'd been grinning for twenty-five years.

"Close," he said. "But I'm good."

On Monday, he went back to Line 4.

There was a new operator there, a kid named Andre, twenty years old, three weeks in. At about five o'clock the transfer jammed, an easy one, the kind you could clear in five seconds with a flick, and Andre watched Mitch stop the line and walk forty feet to the lockout board, hang his lock, walk back, try the start button, clear the jam, and walk back again.

Four minutes.

"You do that every time?" Andre asked.

"Every time."

Andre looked at the transfer, and Mitch could see him doing the math, the way Mitch had done it for twenty years. "Couldn't you just—" The kid made a little flicking motion with two fingers.

Mitch thought about how to answer that. He thought about a sliver of steel and an eyebrow, and a cuff hooked on the corner of a panel, and a pair of yellow posts that had held a line still while he stood there with his arm in it, and a kid's yellow card on a screen, and a song in a VFW hall.

He pointed at the lockout board.

There was a row of hooks on it, one for every setup person and maintenance tech on second shift. Every one of them had a red lock on it with a white name tag. In the middle of the row was his own, *HALVORSEN*, scratched now from use, no dust on it anywhere.

"I did it the fast way for twenty years," Mitch said. "I was the best there was at it."

"So why'd you stop?"

Mitch smiled. "Because I'd like to see grandkids," he said. "You got four minutes, kid. You always have four minutes."

Then he went back to the press, and Line 4 started up, *thunk*, once every three seconds, the sound of a heavy door closing, all shift.

Afterword: Every Warning Had a Witness

Read Part One again and count how many times someone saw what was coming.

Renee wrote the light curtain down thirty-one times. Kyle hung a tag that said *temporary*. Marty filled out a card with Mitch's name on it. An auditor marked it *Serious*. Renee brought Art a sheet showing that people had stopped reporting. Mitch's own wife asked him, twice, if he was being careful.

Nobody in Part One ignored the danger. Every warning had a witness. What it never had was an owner who carried it all the way to the end.

In Part Two, nothing about the people changed. Mitch was still the best operator in the building, and he still took shortcuts. The receiver still got old. The scrap still bounced. The big order still came, and the burr still came off the slitter, and the cuff still caught. What changed was what happened to each warning on the day someone saw it.

The safety walk. The light curtain's nuisance trips got Kyle's name and a date he chose. The receiver went in by October, and Renee put her own arm through the beam before she closed it. The jumper never had a reason to exist.

The big order. "Temporary" meant an owner, an end date, and a red line on a screen everyone could see. Nobody bypassed anything quietly, because nothing could be done quietly.

The kid. Josh's near-miss card got an owner and an answer in forty-one hours. Lockout was retrained on the real press, and Mitch's lock came off the board for the first time in years.

The close call. The light curtain held the line while Mitch stood there with his arm in it. Marty's card traced the burr back to worn slitter knives, and they were fixed at the source, with a photo.

The counter. A rising number of near-miss cards was read as good news: people telling the plant what was about to happen, while it was still cheap to fix.

One owner. One date. A photo of the fix. Someone else checking it. Overdue going up the chain. Any one of those, at any one of those moments, was the difference between a church in October with Mitch in it and a church in October without him.

None of it is expensive. All of it is attention, kept up every day, on every finding, by people who are already busy. That's the hard part, and it's the part that paper and good intentions don't do on their own.

VectorXPro builds Vector Operations Pro around exactly that: walk an area on your phone, give every finding one owner and a date, prove the fix with a photo, have someone else verify it, and send anything overdue up the chain on its own.

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For everyone who went to work and didn't come home, and for the people who still look for them on the line.