# **Calibration**

by Steve Mathys

# Story Submitted for the 10<sup>th</sup> Speculative Fiction Contest

Sponsored by
Society of Actuaries
Actuary of the Future, Forecasting & Futurism, and
Technology Sections

© 2013 Society of Actuaries, All Rights Reserved

The opinions expressed and conclusion reached by the authors are their own and do not represent any official positions or opinion of the Society of Actuaries or its members. The Society of Actuaries makes no representation or warranty to the accuracy of the information.

#### Calibration

# Steve Mathys

**TUESDAY** 

6:15 AM

The envelope appears silently underneath the door precisely at 6:15 am. "Right on time," Stuart thinks.

Sipping coffee, he drops the cream-colored, hand-lettered packet into the inside breast pocket of his jacket. It wasn't yet time to review his numbers; he would save that, like always, for the bus ride. Anything to break the monotony.

His commute hadn't always been so bad. A couple of years ago he'd been part of a car pool that ran from just outside his apartment to his office on Waterman Boulevard, and he'd had the opportunity to pass the DAILY R sign, giving him a quick glance to see what the city's random number generator had provided for that day's experience. And it had been okay, to get that quick adrenaline rush of knowing just a little bit about the world – whether it would rain, whether the 42 train would arrive on time, how many accidents would happen on South Street and how many on North Street, the simple stuff.

Unfortunately, it wasn't anything he could use. Because everyone else had all the same information; and what they knew wasn't that important anyway. There was nothing they could decide to do differently if they didn't like the outcome. And it had become boring. What was the fun of knowing there was a 70 percent chance of rain, once the RNG provided the 0.642316 that forced the Rainmakers to go to work?

But when he'd found Precision Dynamics, all that had changed. They'd opened his eyes to the real way to play the numbers. To make them work for him. To give his life some power again. To make him special.

#### 7:35 AM

Stuart boards the Downtown M bus and sits in the fourth row on the left. This seat is always open, because the gentleman who sits here before him gets off at Stuart's stop, vacating the premises at just the right time. He watches out the window for a while, as they eventually pass the DAILY R sign. Too fast for him to take it all in, he glances at a few of his favorites: RAIN 0.202218; ACCIDENT 0.954924; TRAIN A1 0.800131 TRAIN A2 0.505962 TRAIN A3 0.422891, and so on. An endless string of random

numbers that ultimately make a day in Capital City as boring as watching grass grow, because everything that might happen either did or didn't, depending on its assigned value that day.

The Downtown M is moving slightly slower than normal. Stuart thinks for a moment and remembers that there is a parade this weekend; perhaps preparations have introduced additional traffic to the street this morning. He wonders whether it is too early to open the PD (Precision Dynamics, obviously) envelope yet. Stuart savors the experience of opening the letter almost as much as reading it, and so after sliding it carefully out of his pocket to hold it in his hands for half a minute, he slides it just as carefully back in. "No," he thinks. "I've a bit longer to go today, I can wait."

Stuart is just taking his hand out from under his coat when a large woman sits down in the seat beside him. Not large as in fat, but large as in she is tall enough that her hair brushes the top of the bus as she walks down the aisle; and large as in she has shoulders broader than his; and large as in when she speaks she also leans over onto him, as if he needed more notice that she was actually there.

"Wheew!" she breathes on him. "Glad that's over!" She shuffles out of her overcoat and balls it up in her lap. "I thought it might rain, so I was hauling this tent around for the last half-hour." She was large and her shoulders were large and her face was large, but her eyes were soft and her hair was straight, and her shoes were not wet and she was not dripping on him, so Stuart accepts that she will be sitting beside him regardless of how much he ignores her. His decision to engage in conversation is one that neither he nor PD could have predicted. He wondered what the rank would have been for *Will I engage in conversation on the bus?* 

"It's not going to rain, you can keep that away," he says, pointing to the overcoat. "Didn't you see today's Rs?"

"Huh? No, I didn't. What?" She is flustered, trying to gather the overcoat and a briefcase and a compact all at the same time, not being successful at all. "What's an R?"

Stuart hooks his thumb backwards like an exaggerated hitchhiker. "The DAILY Rs. The random numbers on the big board five blocks back."

"Oh, that thing? Yeah, I saw it. Doesn't make a lick of sense to me, though. What's that got to do with rain?"

"Rain rank today is a point-two-oh-two. So it's not going to rain at all."

The large woman shakes her head at him, her hair bobbing back and forth like a metronome. "So? News forecaster said last night it was fifteen percent chance, and it was cloudy this morning, so I thought..."

"Fifteen percent's less than point-two-oh-two." She just stares at him as if to say, *Yeah, so?* "So it can't rain. The Rainmakers aren't authorized to do it." Another stare. *Why not?* "Because they're not allowed, see? They can't make rain unless the Rain's R value today is less than point-one-five." He's lost her; maybe she's from somewhere else. Springfield? Shelbyville? North Haverbrook? "And if it is less than point-one-five, they *have* to make it rain. Otherwise, what's the point of the ranks anyway?"

The large woman simply blinks her eyes, closes her mouth, gathers all her things, and stands up. She walks to the back of the bus, pulls the stop cord, and waits. At the next stop the driver opens the door and she steps down, the half-open O of her mouth still indicating her confusion at it all. Definitely Shelbyville, Stuart decides.

### 7:57 AM

Welcome to your day, Stuart, the thick, creamy paper from Precision Dynamics reads. It is held in both his hands carefully, unfolded just enough for him to see the top line and the first four values. We hope your values provide you with the certainty you need to excel in all you do. As always, please contact us if any values do not work out as given. Such feedback will help us to clarify our models.

Below the standard introduction begins his personalized list of random numbers. He scans quickly, reading how his day will go as easily as another might read the box scores from the prior evening's ball game.

0.7734 "Wow! I bet Jack's glad to keep coffee off his shirt."

0.2979 "Too bad about that promotion. Carole was really looking forward to it."

0.9689 "Finally, a day without being invited to lunch with Rick. Shocker! I bet he would have suggested Hooters."

0.2759 "Yup, Hooters. Man, that guy needs to get a life."

He skims the rest of the paper; there were another twenty-six values on there, ranging from low to high. He'll take a more studious look at it at his coffee break, when, according to line 16, "0.5728", there will definitely still be coffee available. Why wouldn't there be? Eighty percent of the time there was, and point-five-seven was clearly less than point-eight, so he was set in the coffee department.

While folding the pattern for his day and sliding it back into the envelope, something at the bottom, line 30, half-catches his eye. For a second Stuart thinks it looks like "0.0002". But that can't be; none of his numbers have ever been that low; especially on that question. And for good reason. And upon considering what that question is, clearly, that's not going to happen today, so he must have read that value wrong. A missed decimal point, probably. Nothing to get worked up about.

# 8:35 AM

Apparently it *is* something to get worked up about. Very worked up. Stuart does not know what to do. Obviously there's been some mistake. That is what he's been telling the Customer Service at Precision Dynamics for the last ten minutes, that someone screwed up, his value can't be that low, he's only forty-five, there's no way he's on his way out today! They're wrong! They're wrong!

### 9:04 AM

Stuart sweats at his desk. His head is in his hands. He's staring at his PD letter, where, at the bottom, most clearly, is printed the value 0.0002. That is his random number for the question "Will I die tomorrow?" He is also staring at his own web browser, which is pointing to today's mortality rate for him from AllMort.Com, which *also* is displaying the value 0.0002.

His mouth has gone dry. Coffee did not help. Water did not help. Spitting did not help. Nothing has helped. He picks up the phone, dials from memory. Pick up, he thinks. Pick up, pick up, pickuppickuppickuppickuppickup! "Hello?"

"Ryan! I'm in trouble!"

"Stuart? What do you mean? Did you forget to renew your driver's license again?"

"No!" Stuart glances around and then lowers his voice. He is not yet ready for his colleagues to hear the secret of his recent successes. "No," he whispers. "It's not like that. It's something... serious. Can you meet me?"

Ryan allows an uncomfortable pause to stretch out, breaking Stuart's heart in the process. "Yeah, I guess," he finally sighs, and Stuart groans his thanks into the phone. "Meet me at the usual place in forty-five minutes."

# TUESDAY 10:17 AM

"What the hell took you so long? I've been waiting for you for at least a half hour!" Stuart is so fried now that he can hardly think straight. Ryan has finally sauntered up to their bench in North Park, on the south edge of the pond. Here nobody comes during the day, so when either one of these two paranoiacs wants to talk they meet here.

Ryan was the one to turn Stuart on to Precision Dynamics in the first place. Stuart had noticed a change even before Rick said anything. It was in the way he walked, and talked, like he knew what was going to happen even before it did. More than just the stuff from the DAILY R board: personal stuff, like

whether his car would break down, or whether his girlfriend would break up with him, or whether they would get a good table at their favorite bar. Stuff that you might not think would be a big deal, but actually was quite useful in lots of ways.

Manipulation, for example. Mind games. Small bets. Things nobody would ever suspect you had foreknowledge of, but you did, and were able to exploit for personal gain. Oh, not millions or billions of riches gain, but a confidence, a standing in your own world that you knew what was going on.

Stuart wanted that. He wanted certainty. There was too much uncertainty in the world to just allow it to happen. And that's where Precision Dynamics came in. They helped create certainty.

Well, not certainty. There was absolutely no way a small, independent company could *create* certainty the way the DAILY R Ministry could force the Rainmakers to turn the rain on when the selected random value was less than the predicted probability. There was no way that a group of fifteen number crunchers and two absolutely stunning receptionists could perfectly predict just what was going to happen on any given day. There was no guarantee, of course, and that's why the always that one sentence on each letter saying that if something didn't work out they would like to know what went wrong. Because they didn't really control his life (they said, joking), they just knew a lot about it.

When Ryan had finally given into Stuart's demands for more information, and taken him to the PD headquarters on East 23<sup>rd</sup> street, he'd thought it was a joke. Plain simple frontpiece, sandwiched in between a law office and a dentist. Nondescript sign saying, simply, "Precision Dynamics. Appointment Required". They walked in and immediately Stuart's mind changed.

The walls were covered with numbers – simulations like out of a sci-fi movie. Black, green, red, blue, yellow. There were highlights here, decision trees there, leaders and followers from one side to the other. Stuart had just stared at it until their escort arrived. The rest of the afternoon had been a rather extensive battery of testing and interviews. There was a multiple-choice personality quiz, two hours face-to-face with people asking him stuff about his life ("What side of the drawer do your socks go on? How many coworkers do you have? What are their names? Have you ever been to Borneo?"), hobbies, everything. Well, not everything, but a vast majority of all the stuff that was important to him at the time.

Ultimately there were three such afternoons of inquiry. Four more multiple-choice tests; one inkblot test. And an incomprehensible matching game played against a computer that Stuart could tell had been programmed to beat him, but just slightly.

And after? Well, three weeks after the last interview, Stuart was finally delivered his key – a small device that he carried with him all the time. He presumed it was recording his life and actions and

interactions. And at the end of the day he was required to insert it into his computer at home, and then (and only then) could he ask questions for predictions.

In the evening, an hour after he would submit his questions for the next day, he'd receive a printout. It was all the probabilities of success of each of his questions. Thus the requirement that each question be answerable with a Yes or No, not open-ended. Those were immediately rejected. "Who will fall in love with Peter tomorrow?" had been one of his early attempts at testing the system's abilities. ERROR-NULL QUESTION had been that line's answer, and one more wasted question. Stuart (and, he presumed, everyone else paying \$1,000 a month for Precision Dynamics' services) had his probabilities right away, but would have to wait until the next morning for his randoms.

Originally, that had been the hard part – the waiting. Understanding his life broken down into simple probabilities had been unnerving, but waiting – anticipating, worrying, hoping – that had taken a lot of getting used to. He didn't sleep well the first four nights of asking questions. After that, though, when he saw that most of the probabilities were spot-on (and the few that weren't were cleaned up quickly as the calibrations stabilized around his life), he began to trust more and sleep better.

Once, Stuart had asked how Ryan found out about Precision Dynamics. "My cousin is brother-in-law to the owner. He used to be some real smart insurance guy – actuarial or something. Did this same thing for someone else, then decided to go into it for himself. He started with just his family, trying to predict what they were going to do, finding out if he was right, then going back and forth with his projection." When asked how it worked, Ryan was less helpful. "Man, I don't know! I don't care, neither. All I know is after the first week, it ain't never been wrong for me."

Not for Stuart, either. Which is why he is now so freaked out.

"Ryan, listen," Stuart is saying. "This R is all wrong! Somebody screwed up. They put my probability down there instead of my R. I gotta go fix it before someone finds out."

"Slow down, sucker," says Ryan. "That's not possible. They don't screw up things like that."

"Well, you tell me what it means, then!" shouts Stuart, practically shoving the paper in his face. Ryan's hands gingerly pinch the sides and pull it out to read it. Stuart's finger is stabbing at the bottom line. "There! Point oh-oh-oh-two! That's the same as my probability! I remember from last night because it's about the only thing that doesn't change from day to day! It's been point oh-oh-oh-two since May and it's gonna stay that way until next May! That's what they told me!" He is panting, now, frightened. "So what the hell does that mean, if my R is equal to my prob? Huh? HUH?" his spittle lands on Ryan's cheek, and he flinches quickly.

"I don't know," he says. "Are you sure your prob's point oh-oh-two? I mean, maybe it's another zero in there that you've forgotten."

"No, can't be," and Stuart holds his hand up with fingers spread out. He touches his thumb, and says, "Zero," touches the crook of his hand, saying "point", then each of the next fingers as he ticks off the values. "Zero, zero, zero... two." He sound defeated, as if it's finally sunk in for him. Like he knows what it means.

Ryan is humbled as well. "Damn, man." He hangs his head in silence a moment. "Hey, I thought of something."

Stuart cannot look at him. He is staring at his shoes, at the path, at the green grass growing just at the edge there. It is ragged, just starting to push through the last snow of the season, which came last week. Late in April, yes, but not unprecedented. Of course not. There was a seven percent chance of it and it happened. How do they know that there's a seven percent chance if there's never been a precedent to help decide what the probabilities are? *Amazing*, Stuart thought, what my mind wanders to when it could be thinking about anything during my last day on earth.

### 11:58 AM

It is quiet in the office. Almost everyone has already gone to lunch, to celebrate Daniel's promotion. Carole is the only one who stayed behind. Stuart can see the back of her shirt bobbing up and down a little bit, as she cries tears that are supposed to stay hidden from everyone else. Not wanting to interfere, or to get caught up in anything that might derail Ryan's plan, Stuart avoids her. He is here for one thing; he gently slides his desk drawer open, crouching down so that even if she does look around she won't see him. Reaching in and fumbling around, Stuart finds the Precision Dynamics Emergency Contact card and brings it out into the open. He has turned to leave when he finds Carole standing there, tears rimming her eyes, staring at him with the blank blandness of a deaf cow.

"Carole?" he says, hoping she'll go away quickly. "I'm sorry you didn't get the promotion."

She sniffs back a tear. "How did you know about that? You were out of the office all morning."

Stuart is a little confused. "Oh, I thought –" and he reaches for the PD envelope, thinking he could show her the R, but she interrupts.

"It's not fair!" she wails, and grabs him in a big hug, pressing her tears on his shoulder. "I was so close!"

"Ah, don't worry. It wasn't really that close anyway," he says, hugging back gingerly. "Listen, I've got something real important to take care of, so I'm gonna —"

"What do you mean, not that close?" She talks to his chest, and oddly he likes it. What a strange thing to think about when he's got the most important conversation of his life facing him. Why should he want to take time to think about Carole, and how she feels in his arms, when he might not have more than twelve hours left to live? It's not certain, he hears the echo of Rick's voice again. You have to find out the purity.

And he's going to. Just as soon as he can separate himself from Carole.

"Carole," he pushes her out to arm's length and forces her to look him in the eye. "It wasn't that close. The R on that question was point two-nine, but you only had a twenty-one percent chance of getting that promotion. It didn't work out."

She frowns, and smacks him, hard. "How dare you!" The shock opens his eyes, wide. "I had just as much chance as anyone else!"

And suddenly, Stuart has a vision of himself and Carole, staring down the analysts at Precision Dynamics, like a superhero pair with nothing to lose and everything to gain. But to do that, he'll have to tell her what's been going on. And that could take time he may not have.

Then again, why not? He opens his mouth and begins to speak.

# 2:17 PM

Stuart and Carole are inside Precision Dynamics, on the second floor. There are three analysts across the table from them, dressed in plain suits and ties. Suddenly Stuart feels that the balance of power has shifted far away from him.

When he'd arrived, and presented the Emergency Contact card, which spurred everyone in the front room to move like their butts were on fire, Stuart had felt an incredible euphoria. He was right, they were wrong, they would fix it soon and he'd go back to his normal life. No problems. No point-oh-oh-oh-twos. No muss, no fuss. But, maybe, now with the addition of Carole. She was standing beside him, and together they'd badgered the first analyst for fifteen minutes until he broke down and left the room like *his* butt was on fire.

They wanted to know the purity. That was PD's slang term for the raw random number from the generator before it was rounded to the fourth decimal place. Ryan's suggestion had been that maybe it was larger than point oh-oh-oh-two, and rounded downwards. If so, then Stuart was off the hook. His random was bigger than his probability, and that answer should actually be a "No." "Will I die tomorrow?" No. That was what might happen, and what the analyst should have come back to tell him.

But the analyst hadn't come back. He'd insisted rather vehemently that he couldn't determine what the random number was. There was no record of the purities. That way, it really could be truly random. If they kept records, then people would start analyzing the outcomes, searching for repeated digits too often or not often enough, they'd get other crazies in here like Stuart who wanted to know their purity, did he know just how many random numbers were generated each day by all the simulations going and how much time and effort that would take to record all of those numbers and assign each one to some silly question asked by a stupid pinprick arrogant yuppie like himself who apparently only believed that Precision Dynamics existed to serve his needs and his needs alone and that everyone else might as well bow down and lick his boots?

Stuart most certainly did not know exactly how many random numbers were generated, but he just as certainly did want to know what *his* purity was, for only one question, and he'd taken out the paper and SLAMMED it down on the table, right in front of the little skinny wimp analyst, who had recoiled instantly at the sound and violence of the action. Plus Stuart's shouted accusations, pointing finger, and Carole's insistence that he *did* know the purity, that he *could* find out, that this was a matter of *life and death*, didn't he know his job and didn't he know that the client was always right and didn't he know that he ought to be a little more respectful of others and try to *help* him rather than getting all *snippy* about it?

And that's when the analyst finally left the room. Five minutes later the three suits had entered, and that's how things are now, with two armies amassed across an oval mahogany table with faux-leather chairs pushed back out of the way so everyone can stand and look each other in the eye.

"I'm sorry, sir," says Suit 1, "But we just don't keep that kind of information available."

"That's crap," Stuart replies, "and you know it. And you're not sorry at all, and I know it. So shut up go get me the purity."

"We've been over this many a time," says Suit 2. "What will it take to convince you?"

"The purity," Carole chimes in. "We want to know the purity, and we want it now. This man may die if you don't hurry up and get it."

"I don't think you understand," says Suit 3. "He either will live or die without our intervention.

We don't *make* the outcomes; we only predict."

Stuart sneers the best he can. "Oh, like you only *predicted* that Carole here wouldn't get her promotion? Twenty-one percent probability, you told me," and he points at the paper, "and then give me a random number slightly higher than point two-one," and he stares down where the paper should have the value 0.2979, but nothing is there, "so that... I-" He trails off. Where there should be 0.5728,

his R for the coffee question, again there is a blank. Same for 0.0625, *Will I have to buy more paper?* Ten or twelve of the places where there should be a number are, instead, blank.

Confused, he shoves it across the table at the Suits. "What's going on?"

Suit 3 glances down, but does not touch anything. "Those questions are completed. There is no more uncertainty about them. They either happened or they didn't."

"But why are the numbers disappearing?" He started at the bottom of the page. 0.0002 now stood out even more that there was a blank space just above it where 0.4380 had once been.

Suit 2 now picked up the paper and folded it back in thirds, handing it gently to Stuart. "Sir, I think it's best you leave now. We will not be answering any more questions." Carole takes the sheet from him, unfolding gently to stare. Having learned what this was about less than two hours previously, she's taken to the concept amazingly well.

"Stuart," she says, holding out the paper and pointing to 0.7507 in the middle of the page, "What is that one for?"

"Will I miss the bus on the ride home?" he says from memory. "Thirteen percent on Tuesdays.

Today is Tuesday. Thirteen percent."

She nods. "So there's still a chance that you might miss the bus or not." She holds the paper up in front of his eyes so he can read it. "You see? Not everything is determined. If it was, if it was certain that you'd miss the bus, this value would be gone. You've at least got until the going home bus to try and stop this." She grabs his hand, tugging him out of the room. The Suits just stare silently. "Come on, we're going someplace safe," and as they leave, Stuart steals one glance back over his shoulder. Out of the corner of his eye, he can see Suit 1 putting his hand to his ear, whispering. Giving a command. Stuart runs.

#### 4:48 PM

Ryan has made good on his promise. He meets Stuart again by the bench in North Park, holding a small cloth-wrapped packet. When Stuart opens the corner, Carole's eyes go wide. "I'm not gonna use it," he says. "I don't even know how to hold a gun." He wraps everything back up tight. "It's just for show, to scare them a little."

#### 7:15 PM

"Stuart, I'm scared," Carole whispers. The police cars outside have been there for forty-five minutes, lights flashing. Only recently did they turn them off and start making announcements. "Please, please stop this."

Stuart cannot. There is no more rational thought within him. There is nothing left to think about. He can only stare. Stare at the six people huddled together on the opposite side of Precision Dynamics' Board Room on the fifth floor of the nondescript frontspiece building. Stare at the gun in his hand. Stare at the paper on the table, virtually empty except for twenty or so digits. Stare at the 0.0002 at the bottom. Stare at Carole, who has tears in her eyes that feel like the tears in his. Stare out the window at the overweight cop talking loudly through the bullhorn.

"Sir, please come to the window and tell us what you want. I promise we'll do whatever we can to get you everything you need. Just tell us what you want, and if you do that, and, maybe, let one of the hostages go, we'll do whatever we can to get you what you need."

Stuart is sweating. The gun is slick in his hand. For a second it slips and he fumbles it. Everyone in the room tenses up, closing eyes and gritting teeth. He regains his hold and exhales. He steps to the side of the window, opens it a crack, and leans down to yell through the space.

"I WANT THE PURITY! I WANT THE PURITY! THEY HAVE IT AND THEY WON'T GIVE IT TO ME!"

### 8:37 PM

They're blanks, Carole repeats to herself. Just blanks. Thank God.

Ryan had told her this just after Stuart took the revolver and started walking away. A quick tug on her sleeve and a whispered word. It had relieved both of them to say it and hear it. And yet she couldn't bring herself to tell Stuart. What if he reacted poorly? Would he even listen? Or understand? He was so crazed now, telling the PD employees that they'd all stay there until a minute after midnight, two minutes after, and be proven wrong! He wasn't going to die today! They'd see!

Just blanks.

# 10:42 PM

"It's been six hours, dude," says one of the slumping boys against the wall. "Can't we go now?"

"Give me the purity and you can walk," says Stuart. "I'm beginning to think you guys kind of like all the attention." He leans to the corner of the window again and shouts out.

"Did you get that, suckers? Got your fancy listening devices pointed at the window here? Sensitive enough to pick up a fart, eh?" He's holding the gun in one hand, the paper in the other. The nearly blank paper. The paper that has been reduced to very little on it. Only one value, and nothing else. 0.0002. No introductory sentence. No "Let's work together to make everything the best it can be conclusion." Nothing. And it's all Stuart sees.

"I ain't goin' anywhere! And neither are they! Until twelve oh-one! Then we all waltz out of here like merry Matildas!"

Carole has carefully made her way to each of the hostages in turn, gently explaining about the blanks in the gun, calming them and helping them to be patient. Now that they know he can't hurt them, they've accepted this little episode as the last delusion of a madman who will, soon, be out of their lives and safely into a mental institution where he belongs. Because, hey, what sane man takes a half a dozen people hostage over a random number?

Back with Stuart as he stands at one end of the table, Carole sits beside him, stroking the edge of his hand that rests on the paper, trying to calm him. The fact that it's nearly midnight has not escaped her, or him. He's counting down the minutes as they tick off his watch.

Out of the corner of her eye, Carole sees one of the two doors to the board room slowly start to open. Silently, so as not to make a disturbance, the crack edges wider. Soon she can see a sliver of a Police uniform, a slice of a helmet. A special agent crouching down, ready to storm the room. She can see just one eye; there are two more helmets above his. She makes sure he's looking at her, then shakes her head ever so slightly. *No*, the gesture means. The helmet dips just slightly. He's seen her, then, and maybe they're going to back off?

Carole stands up and moves behind Stuart, to put her hands on his shoulders and give him a little bit of a back rub. In reality she's trying to see the other door, at the other end of the room. She has guessed that there are agents down there, too. She needs to catch an eye...

#### TUESDAY 11:21 PM

"Why won't it go faster?" Stuart says, staring at his watch, then to the paper lying on the table, then to his gun. "Why can't I make time go *faster?*" and he points the gun at his watch, making jabbing motions. "And why won't you disappear?" he says, pointing the gun at the paper.

Just blanks, Carole reminds herself for the thousandth time.

"GO AWAY!" Stuart yells, and jabs the paper again, this time hitting the table with the barrel of the gun as well. He must like this, because he does it a couple more times, yelling a little bit louder each time. "GO AWAY!" Jab. "GO AWAY!" Jab! "GO AWAY!" JAB!

And something explodes in her face. Blanks or not, the gun is a deafening roar only three feet from her ear. The last jab must have set something off. And all of a sudden the room is filled with noise and people jumping and shouts of "SHOTS FIRED! SHOTS FIRED!" and black uniforms and more explosions and she's shouting and others are screaming and Stuart is standing no he's not standing he's fallen to the ground and he's bleeding and there is a smell in the air that smells like smoke and it smells like blood and oh my oh no oh my he's bleeding from his chest in a dozen places okay maybe three and he's lying on the floor and she's kneeling beside him and she's taking his head in her hands and she's whispering It's gonna be all right and he's whispering Yeah I know and then he's not breathing any more and she's crying and he's not crying and he should be crying and she's crying and then there are hands on her arms and they make her stand up and they take her out of the room and she's not in the room and she's sitting on a bench or something and someone has wrapped a blanket around her shoulders but she doesn't want a blanket she wants Stuart and she screams "They were blanks!" and nobody hears her and everyone else is shouting and then she passes out.

#### WEDNESDAY 6:15 AM

The early morning local news leads with the apparent suicide of a middle-aged business man in his office on the east side. It's tragic, but not enough to distract Marcus. Nervous, he has been up for a half an hour already. When the envelope arrives below his door, his first instinct is to tear the damn thing open as soon as possible. "My first randoms!" he says, out loud to nobody in particular. "Let's see what I got!"

Scanning the page, everything seems just about right. He'll have to go back to his list of questions and the probabilities produced the night before, to be reminded of what he'd asked. The only thing that stands out is one number, that seems really small – 0.0002, right at the bottom of the page. "Huh," he says again, "I hope that's not something important."