

A young woman with long brown hair, wearing a dark, heavy winter coat with a fur-lined hood, stands in the foreground in a snowy outdoor setting. She has a slight smile and her hands are in her pockets. In the background, two other people, also in winter coats, are standing in the snow. The scene is overcast and appears to be a residential area with a car partially visible in the distance.

# Emma Comes in from the Cold

A Naked in School Story

Seems Ndenyal

# Naked in School

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## Emma Comes in from the Cold

What happens when the Naked in School Program comes to a high school in Fairbanks, Alaska? Emma and her classmates, using a blizzard of cool tactics, give it a frigid reception as they try to stop it cold. This is a gentle story about the coming of age of a brilliant young woman who discovers her own sexuality while dealing with some unforgiving bureaucracies as she grows up in a world with the Program. Warning: There's romance. And physics.

This story is published as adult entertainment and contains material of an explicit, sexual nature.  
If such materials offend you, please do not read any further.

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# Naked in School - Emma Comes in from the Cold

## Foreword

A preteen girl is orphaned and has to move halfway around the world to live with her only remaining relative. But she's not without resources—mainly her mind, but that her family had some wealth helped her too. Emma's a mathematics prodigy and her childhood experiences in school, because of her classmates' reaction to her intelligence, have forced her to become much more self-reliant and outspoken than most young people. After moving away from her childhood home, beginning in a new school with a totally foreign education system, and needing to become accustomed to a completely different climate, Emma must adapt to her new life and she soon learns that she must face a number of experiences she'd never dreamed were possible.

This is a romantic coming-of-age story that happens to be set in the “Naked in School” universe. Told from her perspective in a humorous, light-hearted way, Emma tells us how she deals, not only with the threat of the impending school nudity program to her sensibilities and morals, but also with the problems of adolescence and difficulties with the bureaucrats she encounters. And although this is a “Naked in School” story, the sex is minimal, but where it occurs, it's essential to the plot. If you're looking for lots of sex, sorry; there are plenty of other NiS stories which have plenty of sex. But if you do stick around, you might enjoy this tale.

Fair warning: there's physics in this story, math, and naughty language too—a decent amount of it, actually—but don't let that put you off. The science is all explained in the story and you might even find that you already know (or have heard about) much of it (the naughty language? Just for color, okay?). The science is just a plot device. I've been told that “Big Bang Theory” isn't popular for the science; it's for the situations and humor. (I wouldn't know since I never saw it—don't have a TV.) Anyway, I hope that the situations and humor in this story will be appreciated too. And unlike your high school science class, there won't be a quiz when you're done, either. All the physics in the story is real—except one bit. You'll probably know which part of the physics is wishful thinking when you see it—but it all *could* happen if someone like Emma does come along.

## Notice

This story is set in a fictional parallel universe very closely related to our Real World. In this story, the names of some characters, organizations, localities, events, and references to publications or movies, which resemble those found in the Real World, are used to establish this story's world setting. All of the identifying names and descriptions used which are similar to any real people, locations, and organizations, exist in this story's universe too and their use here is for strictly fictional purposes, to provide context and reality for the plot. Their use here does not imply that any events described as occurring in those places represent depictions of events involving any real organizations or characters. And of course, any similarities between any real person and any character appearing in this story are purely coincidental and unintentional.

## Chapter 1

“Hey there, little girlfriend,” Roberta Simmons said to me as she came into the room. She looked at the array of books and papers and the laptop strewn over the dining room table, then at my high school class planner which sat on top of the pile of books. Glancing at the pad where I was making notes, she asked, “Hmm? What’re all those calcs for? You must have some strange homework—I didn’t think they covered partial differentials in high school.”

I looked at her and smiled as I pushed away the pad, laptop, and the pile of papers which sat in front of me.

“Not in my school. This isn’t school work. Even though it’s April, it’s like brass monkeys outside still and I was thinking of ways to keep warm, so then I began thinking of ways of storing energy, wasn’t I. Means storing electrons. So I did some maths work here and I think I’ve found a way to maintain persistent Cooper electron pairs in a conductor at room temps at a normal pressure.”

She gasped. “No kidding? Really?”

“Okay, please translate that for a mortal person,” Sally Iverson laughed; she had followed Roberta into the room. “I’m just a lowly engineer-in-training, not a glorified physics nerd like you two.”

“Emma’s talking about room-temperature superconductivity, Sal. They’ve been trying to find any materials to do this for over thirty years now. What did you figure out, Emma?”

I pulled my pad over to show her.

“I was working with the BCS theory here. The problem is how to keep the Cooper pairs associated at higher temps where the increased random molecular motion in the conducting material would unbind them, Robbie,” I began and she nodded. “So far they’ve discovered that hydride materials will work but only at extreme pressures and only up to maybe 13 to 14 degrees C.”

“Hey, that’d work here in Alaska,” Sally joked. “That’s um... 56 or 57 degrees. Summertime temps!”

Roberta shushed her. “Yeah, Emma, I know. That’s like the metallic hydrogen that forms at thousands of atmospheres.”

“Uh huh.” I went on. “So this thought came to me when I was messin’ around with the Josephson effect calcs ‘cause I thought of a way to dope a kind of hydride recipe...”

“Wait. So that’s why you’re using the Schrödinger equation?” Roberta interrupted, pointing. “You’re modeling quantum-mechanical systems?”

“Yeah. I was playing around with the eigenfunctions of the Hamiltonian operators using the eigenvalues of some elements and noticed a few materials that seemed that they could extend the possibility of superconductivity to higher temps. So I was just searching the literature and don’t find anything that suggests that anyone’s doing this line of research.”

Sally broke in, “Okay guys, you’ve really lost me. Right about when I walked in.”

“One sec, Sal,” Roberta said, chuckling. “Let me see what our genius here found. Then we’ll try to translate. So, my little genius, what *did* you find?”

“Oh please... just bog off...” I smiled at her. “I’m no genius, I just know some maths.”

“Sure, and I’m the queen of England,” Roberta laughed. “Now enlighten us.”

“It’s just here, see? I noticed how the properties of niobium and xenon seemed like they could stabilize Cooper pairs in a hydride substrate when constrained in something like a carbon nanotube structure,” I

pointed out my calculations. “I was calculating the lattice vibrations in the substrate and it looks like this recipe can produce lattice coupling. See, here’re the electron donor atoms and here’s how they’re stabilized.”

“How’d you solve those many-body Schrödinger Hamiltonians? Those are some pretty gnarly equations. Do you have it programmed on your laptop?” Roberta pressed.

I blushed. “Erm... not really; mostly they’re estimates I can do in my head. It’s close enough.”

“Goddamn. I just don’t know about you, kid... Fourier transforms in your head, damn...” Roberta shook her head. “Okay, Sal, stop looking so pained. Rough translation: from what I see here, if this shit is right, Emma may have found a solution to room-temp superconductivity. My god, Sally, if she can show that this works in practice, it would definitely get her the physics Nobel—at what age? You’re thirteen, right, Emma?”

I shrugged. “Almost. In August.”

“Hell, you’re just scary smart, Emma,” Sally said, as she sat down next to me. “After you come back down to earth, maybe you can use a teeny bit of those smarts to give me a hand? I have this problem my prof gave me and it’s stumping me and Robbie too. Here.”

She slid over her work and I looked it over. Basically she was using an application of Maxwell’s equations.

“Let’s see what this is... ah, got it. Your application needs to calculate the production and interaction of electric and magnetic fields your circuit is generating. So this problem is to determine how the electric and magnetic fields of this transformer thingie here... erm... this induction device—act on the surrounding circuit currents?” I asked, pointing.

“Yeah. Essentially that. Except we get answers which can’t be physically real.”

I looked over her work. Then I spotted it.

“A-hah... I see. Look here. See this section where you did some partial differential calcs? You set the limits wrong when you did the surface... ah, the double integral here. See, try it this way.” I showed her the correction.

“Oh damn,” Roberta groaned. “She got it in a minute of looking it over and we’ve been at it for an hour, not to mention your time before that, Sal. Emma, how the hell do you do that? My prof jokes that you should be teaching physics, not taking classes in it. I don’t think he was joking.”

I stared at her and shook my head. “No... I need the classes to learn about this stuff in an organized way. I guess I can see how the maths are supposed to work; that’s a gift I have, but I need to learn how it all fits together. My thoughts are awfully disorganized. Like today. I thought of superconductivity when I was coming home from school ‘cause it was brass monkeys... erm, that means so bloody cold out—we never got this cold in England and it’s supposed to be spring, too! The thought popped into my head about how nice it would be to have an electric hand and body warmer right now but efficiently powering them is a problem and that led to thinking about storing energy and that led to electrons in high-energy states and then to ... oh well, you know, this rot,” I said, waving my hand at the papers littering the table.

The girls thanked me and after a few more joking comments about how smart I was, left me to mull over and refine my calculations. I wondered if there was a way to make an apparatus to test this idea. Well, I suppose I can spend a few days trying to see how these calcs can be turned into something practical. I suppose I can ask my prof when I see him.

My thoughts turned to how I got to be so smart—and me, a Londoner kid, wound up in Alaska, of all places.

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I've always been a loner, even when Mum was alive. It comes with being a bright kid, I guess. You learn to become invisible; that way the other kids don't tease or make fun of you for being smarter than them. I learnt that the hard way—don't correct the teacher when she's wrong. Do that too many times and you get a rep—amongst the kids as a showoff and amongst the teachers as a troublemaker. Fortunately a few teachers noticed how advanced I was in school and that led to my mum having me jumped in grades several times. Damn, I still miss Mum.

Me? I'm Emma Elizabeth Clarke. Yes, I'm named after the Queen. That was Grandma's idea; she loved the Queen. You know, she and Grandpa knew the Queen and were guests at Windsor Castle many times? I'm 12 now, 13 in August, and a hybrid of a high school kid and a college coed. Some coed I am—12 years old, 145 centimeters tall... oops, this is the U.S.—that's only four feet nine inches tall (I know that some Brits use feet and inches for height, but I learnt to say it in metric in school. That's how I think too. In metric.)—and I'm almost flat as a board. Mum said her boobs didn't come in till she was 15 or so. I'm hoping that'll happen for me too. Or could I hope for sooner? I have chestnut hair and green eyes. I hate team sports but like running and swimming and do both as much as I can.

That's me. Oh, and I'm a maths prodigy, apparently. Maths comes easily—differential calculus, multivariable calculus, set and group theory, topology, tensor maths, number theory, whatever. I understand it all, like it's there in my head all ready to use as I need it. If you can express it with numbers, then I can understand it completely. But I'm not socially inept, like a lot of other savants (I guess you could use that term for me). I'm not on the autism spectrum, like Asperger's, 'cause I can do just fine socially. But I don't socialize much; I guess it's 'cause my mind is always running full tilt analyzing everything I see, so personal friendships with other kids my age are sort of difficult to maintain. They think I'm being all stuck up and ignoring them when I get lost in thought.

My memories turned to my childhood and recent past. What a bloody whirlwind it's been! I guess my early childhood wasn't entirely "normal," whatever that means. I didn't grow up in a father-mother kind of family. My family was just Mum, Grandma, Grandma's devoted friend who had been her personal assistant before she retired, a live-in au pair for me, and me. Grandma was quite well off; with her husband, who died when I was a toddler, she owned a multinational corporation (actually she was the majority shareholder, owning 63 per cent of the shares). She had been the chief financial officer before she retired and was actually a U.S. citizen. Oh, right, so was Mum. Mum was born in the U.S. and she and my grandparents lived in New York City till Mum was one or two years old. When Mum was born, my grandparents got some kind of a citizenship affidavit for her—I have those papers in my London bank's safe deposit box. I found them when we were settling Grandma's affairs and I kept them because I think I may have a claim to U.S. citizenship, but I've never thought about pursuing that idea. Maybe in the future, if I need to...

Mum was a doctor—my dad too, they met in their medical training, but when I was still a baby, he was killed by an IED in Afghanistan where he was doing a tour as a field surgeon. Then when I was about eight, Mum was sent to Sierra Leone in Africa where she got one of those awful viruses—Marburg, Lassa, or Ebola, don't remember which one, and they couldn't get her home in time to get proper treatment. Grandma became my guardian then. By that time, I had been advanced to year seven—that's secondary school, making me three or four years younger than my classmates. So I quickly learnt how to be invisible to avoid being bullied or getting on the wrong side of any other unpleasantness. My jumping another school year resulted in my beginning year ten when I was just ten

years old.

Just after my eleventh birthday, Grandma's increasing dementia put her in a nursing home and her friend joined her there, too frail to live independently herself, and Grandma's solicitors were working on getting me a guardian. And then six months later, Grandma suffered a stroke and passed away. So now I truly needed a permanent legal guardian, and a situation to protect my inheritance. The executor of Mum's and Grandma's estates—he's our family solicitor—located my only remaining relative, Dad's younger brother, my uncle Scott Clarke. I didn't remember him; I had never met him as he hadn't visited our family after Dad was gone. That probably was because he had been working as geologist for an international energy company and worked strictly overseas; for his current work, he's based out of Fairbanks, Alaska. Uncle Scott agreed to become my guardian, I think mainly because of the £50,000 annual stipend that the trust would pay him. No, that's harsh. He did feel that becoming my guardian was his family duty and we did like each other when we met. Anyway, he's an okay sort of bloke, I guess. He's a bachelor and when I met him, I could see why. Maybe that's why he spends so much time in the field; it keeps his contact with people at a minimum and he's fine with that.

Since Uncle Scott traveled a lot, he kept just a small apartment in Fairbanks for when he wasn't in the field. He told me that the apartment was too small for the two of us, not to mention the problem of my supervision when he was in the field. He came up with an interesting solution to the problem; he'd buy a house, one large enough to have renters, kind of like a boarding house, and get a live-in housekeeper to watch over me and the renters whilst he was in the field. The renters would be drawn from students at the local uni and they could provide "companionship" for me. Scott knew of a possible person for the job, a Mrs Ann Flannery, whom he had known fairly well through his company contacts, so he asked her if she was interested. She asked to meet me before she accepted; we found that we liked each other, so she agreed to take the position.

Uncle Scott found a suitable house near the uni—it's University of Alaska Fairbanks, or UAF, in College, Alaska, actually, just outside the Fairbanks city limits—and he agreed with Mrs F that they'd only rent to graduate students. Mrs F had a daughter, Joyce, who was four years older than me and was currently a pupil at the high school I'd be attending. Uncle Scott arranged with his local attorney, a Mr Alan Jameson, to give Mrs Flannery a power of attorney for any permissions or care I might need when he couldn't be reached. He and the attorney set me up with a spending account to allow me to draw money from my trust stipend. The trust I inherited contained all my mum's and Grandma's assets and it would pay me "HEMS"—health, education, maintenance, and support—each month until I was 18 years old or starting uni, whichever was first; then the payment amounts would be assessed to see if any changes were needed to support me when I went to uni. I'd get full control of the trust when I turned 25.

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After I had moved to Fairbanks, coming to the U.S. on an L-2 visa—it was last summer when I had just turned age 12—it took the school almost a month to get my status sorted. From my U.K. records, it looked like I should get sophomore status here; sophomore year in the States is roughly similar to years ten and eleven back in the U.K.—except in Scotland. They're different in Scotland; schools too. Really.

During my first few weeks here last summer, I began to settle in. With some input from me, Uncle Scott and Mrs F found three graduate students to live with us; Roberta Simmons, who was a first-year PhD student in physics (she wanted to specialize in solid-state physics); Sally Iverson, who had a bachelor's degree in electrical engineering with a computer science minor and was going for an engineering doctorate; and Jennifer Rich, a third-year PhD candidate in geology. She was someone my uncle knew at UAF as he was an adjunct professor there, and like my uncle, spent time in the field, so I

didn't see her much.

Because of my age, I was put in freshman classes during the first week or two of my starting high school whilst they were still organizing my schedule and I was bloomin' bored out of my mind. One class in particular got me really brassed off at the teacher. I had been parked in freshman English whilst my records were being sorted, you see. The teacher was a "Mrs Prissy" and everything had to be by her rules. She got on my wick after the very first assignment I had turned in, the standard "How I spent my summer vacation" essay. When I got it back, I found she had given it two marks: one for content and one for style. Both were failing marks.

On "Content," she indicated that I hadn't addressed the assigned topic, "How I spent my summer vacation." On "Style," she wrote that there were too many spelling errors and improper usages. She had marked all the words I had spelt with the English spelling as wrong, you know, words like colour, specialise, centre—words like that. That's how I learnt them. She also had marked wrong all the common idiomatic phrases I had used, phrases used in most, if not all, British writing.

I went to her after the class and complained vehemently.

"What's this about not writing about what I did this summer?" I asked with some heat.

"Miss, um, you're whom again?"

I pointed to my name which was written on the top of the essay. She didn't even bother looking at it.

"Emma Clarke."

"Miss Clarke, I wanted you to write about vacation topics, to see how your writing expressed your emotion and your enjoyment when you did interesting things. You just wrote about," she looked at the paper, "yes, about packing up a house, visiting offices, moving, and then looking for a house in Fairbanks. That's not vacation material; I expect you to write about what I assign."

"You assigned the topic, 'How I spent my summer vacation.' What I wrote about is precisely what I did during the summer. My grandmother had recently died; she was my guardian, and my uncle came from the U.S. to help me get her affairs in order, close up my home, and get me ready to move here. This was how I spent my entire summer; there was no quote enjoyment unquote involved. What I wrote was exactly what your topic called for. I wouldn't have written about what I didn't do, either.

"And why did you mark all these words wrong?" I pointed at some words; my temper was rising. "Every single one of those words is in the *Random House Dictionary of the English Language*," I said, pointing to a copy on the classroom bookshelf. "That's an *English* dictionary; this class is an *English* class. You wrote the class's name on the board over there. It says 'Mrs Oliver, Freshman English.' How can you call those spelling errors? And how do you expect me to write about a topic if you don't explain your expectations?"

"Miss Clarke, I'm teaching American English. I expect that everyone will use the proper spelling, not a foreign version. And I expect when students write about vacations, they'll write about interesting things they did."

I was gobsmacked at her attitude.

"I just can't believe that you think every kid has a wonderful time when school's not in session," I snarled at her. "I refuse to accept that explanation. And on the spelling? Please don't suggest that the English spelling I learnt is not proper. The school doesn't call this class 'American English,' after all. Another thing... idioms are idioms. They're words or phrases whose literal meaning doesn't match their true meaning but are accepted as proper usage. You marked many of my idiomatic usages wrong.

They're common idioms."

"That's not how people talk here, miss. That may be common where you used to live but not here. So I marked them as improper usages."

I was fuming. "So you're not adjusting the grade?"

"No. I will expect you to learn to write properly."

This was too much. I marched right down to Mr Smith, the assistant principal, over that row. Immediately. His office was just inside the reception door and the secretary didn't see me come in; I'm short so from her seat she couldn't see me over the counter so I was able to get to his office without being diverted. I was happy to see that he was in. I tapped on the door frame.

"Erm, Mr Smith? May I have a minute?" I asked quietly.

He looked up.

"Ah, yes; you're, um, Miss... Clarke, is it? Come in."

"Thank you, sir."

My anger was threatening to boil over. I wouldn't let it, I wouldn't let what happened with Mrs Prissy get on my wick and get me all eppy over her being a nit. But it all came out anyway.

"Sir, that dozy cow, Mrs Oliver, gave me a bloody failing mark on my frikkin' first essay and..." I fumed.

"Calm down, Miss Clarke; sit and let's discuss it. Let me get your file, okay?"

I nodded, took a deep breath, and sat while he rang up someone and spoke for a minute.

"Okay, Emma, I'll have it in a minute. You should know that we've had some problems trying to figure out how to place you; the British education system is quite different from ours. Now what did you want to tell me?"

"Yes sir. I won't set foot in that dozy teacher's room again..."

"Dozy?"

"Erm, stupid. Now, don't tell me to be respectful, sir. She *is* stupid. First, when she set us the essay assignment, I asked her what writing style to use, the ones I learnt back home, expository and analytical or narrative, and got a blank look. She asked what I meant. Doesn't she know about writing styles? There are others besides those three but they don't apply for essays about biographical topics, do they. So she told us to 'write normally.'" I made finger quotation marks. "I used a normal narrative style. Also she had a secret agenda about what she wanted in the essay. She wanted us to write about all the fun things we did during the summer. Well, my summer wasn't at all fun." I summarized my summer activities for him. "Here's what I got back. She gave it failing marks; I've *never* gotten less than top marks in any subject."

I put the essay on his desk and he glanced at it.

"Yes, I understand the spelling issue. Mrs Oliver is terribly inflexible..." he began but I interrupted.

"She had the *Random House Dictionary of the English Language* on her shelf. But she said that the English spelling of those *English* words wasn't proper."

He sighed. "Yes, I can see where you're angry. But what's with these phrases in your essay... 'I engaged the removal company'; 'we had to bin all of the old clothes'; 'I rang up the solicitor'; 'when I

sat for my last exam'; 'she was stood at the counter'; 'when they finally sorted my records' ...these phrases, others too, were all marked as improper usage?"

"Yep. Those are common usages in Britain; some are even standard in the language. It's how everyone speaks and writes. As well, most of those idioms or word usages are proper in formal writing. But Oliver said that since she wasn't familiar with those usages, then they were improper and..."

Just then someone came in with a folder.

"Thanks, Jessica," Smith said. He opened it and turned to me. "Oh yes, this indecipherable exam record. The top paper in your file is a copy of your results from something called an eleven-plus exam taken in the U.K., but we didn't know what to make of these scores."

"That's right; I had sat for the eleven-plus exam back in London when I was ten. They give that exam to eleven-year-olds for admission to selective grammar and independent schools. I was already in a selective school but I wanted to test out of lower levels of English and maths, so my headmaster recommended that I sit for this exam. I got high marks in the verbal and English subject areas, maths too."

"The Language Arts Department doesn't know how to interpret your score of 139-140."

"Ah. Those are age-standardized marks; they never give out raw marks. I was three standard deviations above the mean, you see that in the report?"

"Yes."

"So that would translate, I guess, to the 99.9 percentile in verbal, non-verbal, English, and maths performance. That score was matched and standardized to other ten-year-olds. You saw that in my last school year I was in year ten English?"

"Yes. Okay. And that's equivalent to sophomore, as I understand the grade level."

"Almost the same, for all practical matters," I agreed. "So you can see why I was quite cross being parked in a freshman English class, but was really wiggled out after being told that I didn't read her mind about exactly what she wanted me to write about in my essay and that my use of the language wasn't quote proper unquote. And then getting a failing mark. This is from a teacher who doesn't know about the different writing styles, too?"

"I really can't answer that, Emma. But, according to the note I see here in your file, it does look like, based on the writing samples you provided from essays you did back at your London school, we can put you into a junior English class. And of course your grade in this essay," he waved the copy, "will be tossed out."

After thanking him, I left; I was chuffed that the school had finally organized that part of my U.K. school record. By the next day, they had me in a junior English class: Modern English Literature. Now I'd be reading authors who wrote using the Queen's English. Yep. Proper English.

But that English teacher wasn't to be my only problem with the school's personnel, I quickly learnt. Miss Williams, the school's counselor, took a "special" interest in me. She felt that I shouldn't be in high school at age 12, that I needed to be with my own age group for my "mental and social development." She was afraid that my being in high school would endanger my safety—those nasty boys, you know. Crikey, you know it's actually the *girls* you need to watch out for, don't you. She maintained that my test scores didn't adequately measure my knowledge of the subjects and that only by spending the year in that particular subject class, could I learn that subject. Me? I wasn't impressed with her ideas. She had what credentials? A bachelor's in education with a psych minor? Bleh.

Fortunately wiser and more experienced heads made the placement decisions and prevailed.

I wound up in sophomore biology, world history, and health and phys ed; junior English and chemistry; and fourth year French (I was fluent after living years with my French au pairs); and had tested out of physics and maths, so I had some free time. They tried to push me into taking some electives but I had no interest in home economics, photography, art, music... whatever. So I got study hall, but within a month or so, I wound up using my study hall time tutoring a few kids who were having problems.

That's about when I decided to stop at the Physics Department office at UAF—my high school is actually on the south edge of their campus—to speak to their chairman about taking advanced classes. When I tried to convince him that I was qualified (I told him to set me any physics problem of his choice at any level to solve—sounds conceited, right? I guess it does.), it looked like he was going to put me off and send me away; then I noticed a Newton's cradle on a shelf in his office. (That's the toy which has a series of five balls in a row, each touching the next, suspended by two strings in a frame. You pull one ball away from the others, let it go, and when it swings down and hits the adjacent ball, the one at the far end of the row flies up.)

“Oh, let me demonstrate something. See your Newton's cradle?” He nodded, curious about what I was going to do. “It's supposed to show the conservation of momentum and energy. The three center balls are supposed to remain stationary when the striking ball hits the row and only the ball at the opposite end should move. But that actually doesn't happen, if you watch really carefully.”

“Well, I do notice that the other balls do move a tiny bit,” he agreed.

“Yep. The first collision breaks up the line of balls a bit; that's because of their finite elastic response. So a fair amount of momentum conservation is actually lost. Eventually the movement of all the balls gets in phase and that happens because of the viscoelastic dissipation in the impacts. The balls appear to interact as points of mass that are connected by Hertzian springs and the system decay can be modeled by a linear dependence on the velocity—the Stokes law. I'll show you what I mean.”

I took down the toy and showed him how the intermediate balls did not remain still while the end ones did fly out as expected. He had a white board in his office, so I took a marker and began to write out the equations of motion which could describe the behavior of those three center balls, which included an application of the second-order velocity Verlet algorithm, Poisson's ratio, and Young's modulus.

He was kinda speechless when I finished (*giggle*). That's when he shook his head, picked up his phone, and arranged an interview for me with some physics and maths profs.

“I guess you know your classical mechanics, Miss Clarke. We'll see about some other areas, okay?”

Two days later, I met with four faculty members who spoke to me for a while and then they set me a bunch of problems to solve. The problems were taken from some prior years' finals for various junior and senior undergrad maths courses like calculus, statistics, and linear algebra, plus some corresponding physics courses too—mainly the uni's classical mechanics, quantum mechanics, thermodynamics/statistical mechanics, and electromagnetism courses.

They had me stand at a whiteboard and show my solutions whilst I explained my reasoning. I noticed that my approach to some of the problems, particularly in the advanced maths topics, produced a significant reaction among the maths faculty members. Apparently my approach was unique—of course, I had never gotten formal training in the “traditional” approach to solving these problems so I had simply devised my own approaches. So I stopped simply working my way through the problems they gave me and I began discussing various possible approaches to solving the problems, comparing their traditional methods to the ones I used; that's when the “examination” they had started giving me

turned into a conference session.

I pretty much aced all of the problems they posed for me and voila, I was told that I could be admitted as a non-matriculating student until my status and level could be sorted. They recommended that I enroll in graduate level physics and maths courses because I had essentially tested out of the undergrad ones. As I was leaving, I got a chuckle when I overheard them begin to argue over which department would get me. So I began sitting in on several graduate physics and maths classes that autumn and got to know several of the profs in both departments.

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My high school classes were, well, classes. After the initial shock that the older kids got when they noticed a prepubescent kid roaming the high school halls—and my hearing calls like, “Look out! Lost kindergarten kid!” ... “Hey, it’s Young Sheldon!” and “No, not Young Sheldon, it’s Young Shelly!”—I began to become invisible again. That is, except for the needy kids. I had noticed that in some of my classes, I could easily identify those kids who needed help. So I approached them after class or in the café. I guess my tiny stature and big smile disarmed them, but after a couple of months, I had about twenty loyal—no, fiercely loyal—kids whom I helped in study hall or in the café. The teachers were happy about their pupils’ improved grades and the assistant principal was overjoyed at getting an unpaid, well, I *was* a teacher. I really was, in a way, I guess. He even assigned us a classroom to use when it was empty.

A number of the kids I helped were native Alaskans, members of the Athabascans and Inupiaqs, and they told me of the taunting they got in school and how their families still experienced some discrimination in the community. Some of their family members, cousins or siblings, were at risk, from either drugs or bad associations or both. I got to talk to the ones who were in my school. It’s amazing—since I wasn’t their age, I wasn’t a peer, so I wasn’t a threat to them socially. I was able, through contacts my uncle or Mrs F had (she knew *everyone* in Fairbanks, it seemed), to find opportunities for them for jobs or other help. I made a particular effort to try to pair pupils who needed help with other kids who could be their study partners to provide encouragement and support. And I was able to keep any news of my help to these kids fairly private; I told the kids I helped that they wouldn’t like it getting around that a little kid helped them, would they?

So I guess I became a hero to everyone except to that spacky Miss Williams, the school’s counselor. She’d been meeting with me frequently during this term, trying to convince me to socialize and get involved with school activities.

“Why don’t you date?” she would ask me. Like, at almost every session.

“Date who?” I would retort. “Look at me. I’m 12 years old and way less than five feet tall. Unafflicted by puberty. I should get dates with high school boys? What high school boy would want to be seen taking me out?”

“You should be doing team sports or join clubs. That way you’ll meet other kids.”

“Compete in team sports?” I’d reply. “Against kids two to six years older? What sport do you suggest, surely not basketball? In volleyball I can barely reach the *bottom* of the net. (Yeah, that was an exaggeration.) I run and swim, but those team practices take way too much time before or after school. And there isn’t any club that I’d be interested in.”

“But you’re missing out on your childhood,” she would sigh.

I had lived my childhood. I’m glad it’s over. The woman’s a bloody berk.

The reason that the club scene is not for me is because it’s, well, charitably, it’s filled with either nerds

or kids who tend to be single-minded types. I'm not a nerd. Nor a swot. Absolutely not single-minded, either; I have lots of non-technical interests, like a love for good literature and a fascination with history. There's no one in school who's truly my peer. I like Joyce and she's in my grade for some classes but she's, well, a high school girl, fashion and boy conscious. I have no interest in fashion or boys. Clothes are clothes... well, in the winter in the middle of Alaska, the more you wear, the better. And the boys in high school? Don't tempt me to say what I really think of most of them. But I do like my housemates, a lot. They're smart and funny. But they have this, well... hunger, I guess. A hunger to study, to learn, to make a career, and sometimes that's a bit overpowering for me. I suppose that's a wee bit of childhood left in me, innit.

My own hunger to learn comes from a curiosity about things. How numbers work. How nature works. How to solve interesting puzzles. I suppose I'll think about a career when I need to, but now, it's all about learning stuff and enjoying using the new knowledge.

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In early April, I had been reading one of my English lit assignments—Jane Austen's *Emma*—how ace was that? ...and was marveling at how much the fictional Emma Woodhouse, a brilliant heiress, and I had in common, not in matchmaking for marriage, but in helping my classmates with their classes and matching them up with suitable study partners. I was jolted out of my reverie—wool-gathering, Grandma called it—when I heard the door slam and Joyce calling, “I'm home!”

Joyce had been at some kind of school-spirit program; I don't pay much attention to non-academic school activities so I couldn't recall exactly what that program was.

School programs—oh yes, how could I forget? Last week I had heard a rumor which had just begun circulating in my school about some kind of school program that had started up in number of high schools in the lower 48. The rumor said that high-school kids there were being made to attend school whilst naked. Now, talk to me about some really spacky ideas; this one goes way beyond that. But those rumors turned out to be actual fact, unfortunately. We soon began to hear these stories about a new social “curriculum-enhancement” program that all U.S. high schools would eventually be required to adopt. To make kids less modest and more “in tune” with their sexual development, a mandatory nudity program for high school pupils had been developed and was now being introduced in selected U.S. high schools and was planned to become a national high-school requirement. Well, if you listened to my classmates' comments about this weirdness, such a program would never be possible to have here in Fairbanks.

My classmates were incredulous at just the *suggestion* that a federal program like this could ever come to Alaska. Making Alaskan kids just go to school here whilst starkers? Compete in school sports whilst naked? Hello, do those dingbats in Washington know that it gets *cold* here? Like, *really* cold? Our big sports are Nordic and Alpine skiing. Tobogganing. They play U.S. football here too. In the autumn when it's cold out. (*Real* football is called “soccer” in the States. Yanks are strange. They like to rename things for no good reason.) Do they play football whilst naked? I'd think you'd have to be an idiot to play U.S. football whilst naked—it's like rugby but more violent. And playing indoor sports like basketball or volleyball in our gym whilst naked would give you frostbite.

Our buildings are kinda old. They can't get the gym to be much over 15 degrees—you know, that's about 60 in Fahrenheit. Even then, that temperature only happens when the sun is beating on the roof all day. Otherwise the gym's colder. And the sun's only out in the summer—not for much of the winter.

I need to point out that Fairbanks is just shy of being 200 kilometers from the Arctic Circle—converting the distance, that's only about 120 miles away. So in the late autumn, winter, and

early spring, there's just about no sun to be seen. On the equinoxes, the sun only gets about 25 degrees above the horizon at noon—that's just a bit more than two fists' breadth when held at arm's length. Between mid-September and mid-March, the sun is lower than that, which means it never gets much above the horizon. So, yes, in the winter it's *cold*. ("Cold" could be said about the entire school year, actually. The average temperature here over the 8½-month school year is about negative 12 degrees C—that's 10 degrees F.)

The classrooms are pretty chilly too, usually around 18–19C (64–66F). People usually wear sweaters in class. Sitting still, it can get chilly even with layers of clothing on because of the draft from the ventilation system. Also our school has passageways which connect its building sections together; they're covered and they're screened to keep the blowing snow out, but still, they aren't heated like the interior hallways. Naked kids would have to walk through these passageways to get from one building section to another. True, people who grow up here are used to the cold. But that's because they can always put on a clothing layer or two more! Forced nudity here? Not happening here, my classmates proclaimed.

I didn't agree with my classmates. Never underestimate the power of stupidity.

## Chapter 2

By mid-April, I had finished refining my Cooper-pair calculations; I couldn't find any errors or invalid assumptions in the calcs, and had also come up with some ideas for a device to give the material recipe I had developed a practical test. That's when I decided it was time to show my idea to my physics mentor prof at UAF and get his opinion. I hadn't mentioned it before, but the Physics Department had won my loyalties. They had promised me a bunch of things: I would be sponsored for a highly accelerated BS program which would allow me to sit the required courses as a regular class member and by completing others by testing out. I could get course credit for some humanities by independent study too, completing the course by writing a major essay. I would also be admitted to the Physics PhD program; and for the icing on the cake, I would be given a teaching assistantship—as soon as my visa could be organized to allow that. I had learnt that I loved to teach and was good at it too.

Anyway, after I showed my Cooper-pair calcs to my prof, he went totally bat-shit and rang up every faculty member he could reach and just about ordered them to get to the seminar room, *right now*. Then he practically dragged me there and told me to get up front and present my “research,” as he called it. When I was done talking, there was a firestorm of applause and every solid-state or condensed-matter specialist in the room was clamoring that I needed to set up a project to build the apparatus I had designed to test my mathematical theory. When the noise level finally toned down somewhat, the chairman, who had wandered into the room after hearing all the noise, pointed out that the cost of the supplies and equipment needed for doing such a proof of concept project was well above the department's budget and any existing grant funds couldn't be used for unrelated work.

This news put an immediate damper on the celebration. So I went to my prof and whispered in his ear, “I'm sure that I can self-fund this, you know.”

He stared at me. “What! How? This will cost maybe \$100,000 to \$200,000, as a quick guess.”

“I have access to my family trust. I think I can get the trustees to make a grant. If I write up my calcs like an article in *Physical Review Letters*, could the department get it vetted so that it would have peer support?”

“Absolutely, Emma! This is the most exciting thing I've seen in my entire career. Let's get going on this.” He turned to the others in the room, which now had broken up into small conversational groups. “Everyone! Emma just told me that she has an idea for a grant opportunity. So let's put the enthusiasm on hold for a bit and we'll see how the funding develops. Also—please respect the confidentiality of her research. She has priority, as you all know, and needs to get some patent advice too. This is exciting, but let's damp it down a bit, okay?”

There was a chorus of agreement from the group and everyone began to leave, most people stopping to chat with me for a minute or two. But soon I had to return to the boring life of a high-school student, and that's how I completed my first year of high school in Fairbanks. UAF did have a number of undergrad summer classes, so I registered for a few which were required for my bachelor's degree. But most of the summer would be occupied with my working on the superconductivity component recipe and trying to find a way to make its components into a conductor—some kind of wire—to carry the power.

I had sent the copy of my paper with the funding request and its faculty review to my trustee, and Uncle Scott's local attorney, Mr Jameson, had added a note that he was in the process of submitting a patent application, even if the final device wasn't possible to build as planned. I had come to rely on Mr Jameson and also Mrs F since Uncle Scott was back in the field as soon as the weather cleared up in the early spring. According to Mr Jameson, any patent-licensing proceeds could be assigned to the trust or to a company created by the trust. He also told me to put a dated copy of my original

calculation pages in an envelope, seal it, and send it to him by certified post. He'd put the unopened letter in his safe. That, he said, would be proof of any patent priority.

We got an immediate response—just a week later. My trustees liked the idea for the project and agreed to fund it from a foundation which had been created by the corporation that my trust owned. Making the grant that way would apparently avoid any taxes too. The grant funds I was given allowed us to obtain some really high-tech apparatus which could be shipped to us quickly, since it was now the (short) summer here.

So most of my summer was spent in working on the project, taking uni classes, and enjoying the summer warmth. Crikey—nobody had warned me about the mosquitos! They're *huge*! The first time that I complained about them, Joyce joked, "Hey, mosquitoes are our state bird!" And one of my classmates claimed, as he swatted at a particularly large one, "The mosquito repellent that works best around here is a shotgun."

Also during the summer, the Physics Department helped me form a team made up of two of the department's faculty members and several students to work on the process for forming the superconducting material into a wire conductor; my initial idea of containing the recipe of doped substrate in aligned linear carbon nanotubes was turning out to be very difficult to build. I worked on refining the substrate recipe—based on my first calculations on Cooper pair restraint, I had some additional tweaks to make—and I also had ideas for other methods for charging the nanotubes with the formulation. After the patent app was submitted, I had also organized a paper for publication in *Nature Materials*, a major physics journal. The paper was accepted that September and was sent out for peer review.

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When September arrived, high school started up again, but now I was attending both uni and high-school classes, splitting my time between them, and my small amount of free time was spent tutoring and checking on my physics project. There was little I could do for the physics project right now since it was all lab work at this point and my specialty was theoretical, so my little group at the uni was busy in the lab.

The month passed with nothing remarkable occurring in either school, but during the last week of September, it got very cold suddenly and we got hit with an unusual early winter storm; the northern lights auroral display was incredible after the storm passed. About a week after that freak storm, I was at home doing my schoolwork, sitting at the dining room table, when Mrs Flannery came in.

"Emma dear, I'm afraid I have bad news—I just got a call from AZF Energy. Your Uncle Scott hasn't been heard from; he's more than seven days overdue at his site."

"Oh damn—that's bad. Yeah, I figured something was up; he hasn't rung me lately. He was using his company's plane on this latest survey trip—he must have been flying when the storm hit. Shit."

She looked at me—she didn't like my cursing, but ... well, I cursed. A lot. My mum and Grandma did all the time and I picked up that bad habit.

"Yes, they told me that the searches haven't found any trace of him or the plane so far. I'm so sorry," Mrs Flannery said to me whilst she rubbed my back gently.

I was kind of expecting to hear something bad when I hadn't gotten a ring from him for almost a fortnight; Scott usually rang me every five to six days to check in and see how I was doing. My life hadn't exactly been forgiving where the fates of my other relatives were concerned.

"Well, Mrs F, you know I barely knew him; I had never met him before he came to England to help

me move here. Till last year I was living in London and he's been working outside the U.K. for years. That doesn't mean I don't care about him, but it's not like he ever was like a parent figure for me."

"Yes, I knew that, dear. But still..."

"Yeah, I know. He *is* my family and I do love him. Now the bloody government people will all be coming around, won't they. I've heard it all before, that I'll need a legal guardian again. Okay, I guess I'll have to talk to Mr Jameson, about this, right?"

Mrs Flannery nodded. "Yes. Your attorney should know what needs to be done now. Well, I'm sorry for the bad news again, dear. Joyce should be home soon and we'll have dinner in about an hour."

"Thanks, Mrs F. And don't worry about me. I'll be just fine; everything always works out for me, it seems. I've learnt not to panic when bad stuff happens."

She left, leaving me to my own thoughts.

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Word had quickly reached the school about my missing uncle, but I had prepared and organized a letter from Mr Jameson to the principal which said that despite his being missing, he was still my legal guardian unless his status became changed to deceased. My uncle had put sufficient powers of attorney in place to cover any normal school, medical, or social need. Even so, I had to suffer, together with Mrs F and Mr Jameson, a visit from the state's Child Protective Services people. They soon left, apparently satisfied that my situation was stable and that if any guardianship issues needed to be addressed, the U.K. consulate would be the appropriate authority to get involved.

Miss Williams, the nosey parker, wasn't satisfied with my situation being so easily sorted, however.

She tried to get me to tell her how devastating Uncle Scott's disappearance was for me; that the emotional shock was too much and that I probably needed psychological therapy—perhaps even antidepressants—to help me cope. I politely told her that I had lost two family members with whom I had been much closer, my mum and grandma, and that I had coped with their loss without significant damage to my psyche. She then claimed that I must be in denial.

That was it; I was already quite cross with the woman. Now, I decided, I would not deal with her any longer. I called Mr Jameson and explained the problem. He got me an appointment with a licensed PhD psychologist who spoke to me for a while and then went to the school and asked to review Miss Williams' notes. Apparently, after a brief disagreement over pupil privacy, which the school lost, she found that Williams had very few notes about me, so the principal was told that Williams was not to see me anymore for any of her so-called mental health counseling sessions.

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Maybe I should see if UAF also has a degree program in precognition, because, as you've probably figured out since you're reading my story, that that bloody Naked in School Program did indeed come to Fairbanks, Alaska. The notice came by post to Mrs F on the 12<sup>th</sup> of October; it spoke about how her daughter Joyce was now eligible to be selected to participate in the Program as a naked student and that Mrs F, as Joyce's parent, had to complete and sign various forms, one which was a parental acknowledgment of the notification; another was for the parent to give the required informed consent; a third was a certification for females, that the pupil had received "The Shot" within the past three months (this was an immunization which prevented pregnancy and sexually transmitted diseases); and a fourth was a permission form for the school to administer The Shot if the pupil's anti-pregnancy status wasn't current. A form and instructions for requesting an exemption from participating in the Program was included too. I glanced at the forms mentioning The Shot; I'd need to find out what that

was all about. Then when I began reading the choices on the exemption form, I noticed that the exemption options were quite limited, though. Something else to investigate. I noticed Mrs F reading the exemption instructions.

“Oh good,” she said, looking up at me. “Joyce can get an exemption.”

She explained. Apparently Joyce suffered from a condition called Raynaud’s phenomenon and her symptoms were triggered by her getting cold, which explained why she always seemed to be wearing a lot of clothes. Silly me. I thought she *really* must like clothes, much more than her friends. I asked Mrs F about Raynaud’s.

She told me, “A year or two ago Joyce began getting discolorations of her fingers, toes, ears, and nose and her skin would feel really cold and turn white or even bluish. It spread to her feet too and they got numb and painful. When her feet got bad, it hurt her to walk or simply stand. Even with using heat pads or taking a hot bath, the pain could last for several hours. Her doc told us this was typical Raynaud’s, but a severe form of it. He said that when she gets cold, her blood vessels tighten and this cuts off the blood to her extremities. He told me that this condition isn’t caused by another disease and she’d be fine if she kept her body warm. This is a bad problem to have in Alaska,” she said ruefully. “So this nudity nonsense is out for her; she has a medical reason.”

“Yeah, that’s the pits and especially in our cold climate. Say... Did a school letter come about me?” I asked.

“No. Maybe because of your age, 13, you’re automatically exempt. High schoolers are 14 and older.”

“Hmm. Somehow I’m not so sure they’d exempt me for age,” I mused. “Doing that would be intelligent. I think there’s little intelligence shown about what’s in this program. Look here.”

I had been reading through the brochure which came with the letter.

“First, at the beginning there’s an intro and reading it, I see that it’s pure bollockry.”

“Emma, what’s that word?”

“Well, you don’t like cursing, but for Yanks, it basically means bullshit. Let me read it to you.

“‘The Program has been carefully designed to help you become more comfortable with your body and your sexuality, to treat others in natural balance as both individual people and sexual beings, to learn to harness your natural energies, and to behave in a more mature and morally conscious manner. By becoming more comfortable with your body and sexuality, your sexual tensions will be diminished. This is your opportunity for rapid personal growth.’ That rot is pure psychobabble.”

She nodded. “I agree. Also, I don’t see how being humiliated by being the only naked kid in a high school would make someone more comfortable with their body.”

I continued, “Then there’s another requirement—it’s called ‘reasonable requests’—crikey, this is even more humiliating. From reading this, I see that it allows other students to grope the sexual organs of a starkers kid. So that means that the school will not only sanction sexual molestation, this rule compels the Program kids to willingly endure it. Another rule listed here is called ‘relief.’ The kids in the Program are expected to wank themselves or get another student to do it to them before each class starts.

“And there’s even more cack here. It says nudity is required everywhere for the whole week, even coming to school. If you use the school’s transportation, this says you must be naked on the bus during your participation week. Otherwise, it says pupils are to disrobe outside the school and leave their clothes in boxes there. Then they’re supposed to reverse the process at the end of the day and get

dressed outside. You know that school starts at 7:55 a.m. In the winter it's close to zero F then. And what happens if it's snowing?"

"That's just insane," she said.

"Another thing. It says that all sports are to be done naked, but protective equipment for that sport may be worn. Most of our winter sports are outdoors. But skiing, and in the spring, track and footb... erm, soccer, don't need much special protective equipment. Just the appropriate clothing. Oh, the hockey rink is outdoors. Ugh, naked hockey? Oh yeah, those indoor sports... the gym and classrooms are bloody cold much of the time too, so I'm trying to imagine how one would play competitive sports like volleyball or basketball in a cold gym whilst starkers."

"Oh yes. Joyce has problems with her cold classrooms, especially in the gym. She wears sweats and a warmup suit and the teachers complain about her heavy gym clothes all the time. They said if she has a medical reason for wearing heavy clothes, then she shouldn't be in gym at all. That's a really stupid idea. She likes the exercise she gets in gym class; she just needs heavier clothing while she's exercising."

I flipped another page. "Look. It says that you don't pass the Program if you don't do something they call 'community outreach.' That's apparently being naked in places outside of the school. Like the shops? The mall? *Outside*? How do you even get to these places without getting frostbite all over your body, let alone getting... what is it... hypo... hypothermic?"

"Close. Hypothermia."

Then I read to her the other mandatory activities which the Program included.

"It says here, I quote, 'All bathroom use and all gym preparation (for physical education or athletic competitions, showering, and similar activities) shall be performed in the facilities provided for the opposite sex.' I ask you, is it safe for a lone naked girl to be showering in a boys' locker room? 'Cause that's what this requires."

Mrs F only shook her head.

"And there's more of this rot. Here's a thing called 'classroom demonstrations.' I'll read what this says: 'Participants in the Program must be expected to assist teachers and instructors in the performance of their lesson plans. Participants shall cooperate with their teachers. Because of the educational value of said assistance, teachers and instructors may ask for participation and demonstration beyond that described under reasonable requests.' It also says that demonstrations can be videotaped and published on the school website."

Mrs F interrupted, "Goodness, really? What kinds of things could be videotaped?"

"It says that teachers can use Program students as live training aids for health, biology, physical education, or sexual education classes, as a figure model in art or photography classes, and as a research subject for sociology or psychology classes. So I guess they can record those. And it looks like teachers using kids for these demonstrations get even more liberties with kids' bodies than the reasonable requests allow."

I read a bit more to myself. Damn, the bloody minging prats who thought up those rules should be ... well, given a taste of their own rules. I was almost physically sick after reading some examples. Any objections or resistance to having your body violated in the ways suggested was not permitted. Refusing reasonable requests and not participating in classroom demonstrations were other Program violations, and some violations would extend the Program participation time by days or weeks. I pointed out a few of those passages to Mrs F.

“Oh my god, that’s just wrong. We have to try stopping this. I’m calling some other parents I know. We need to go to the school to see what the devil this is all about.”

About an hour later, Mrs F called me to the phone. It was Mr Jameson, and he asked for me.

“Emma, your uncle got a letter from the school addressed to him. All his mail comes to me while he’s in the field. I need to come by to talk to you about it. Will you be there in... say... thirty minutes?”

“Okay. This is about that naked program, right? Mrs F got a post too.”

“It is,” he answered. “Be there soon.”

When he arrived, I sat down with him and Mrs F to discuss how the Program would apply to me.

“Okay, Emma. First, this letter is addressed to Dr. Scott Clarke, *legal guardian* of Emma E. Clarke. I emphasize the term ‘legal guardian.’ The instructions clearly state that only a parent or *legal guardian* can sign the forms and make any exemption requests. I can’t sign and neither can Mrs F. Second, I wondered about the issue of the legality of compulsory nudity for minors. I checked and found decisions from several federal appeals courts, both allowing mandatory nudity and denying it. Our federal appeals court, the ninth circuit, allowed it, but earlier this year the entire issue was taken up by the U.S. Supreme Court. A hearing hasn’t been scheduled yet so no decision is expected from them at least before next May, so, at this point, in Alaska the Program’s considered legal. All but three of the states in the ninth circuit mostly have relatively mild winter climates, as compared to Alaska, that is—the more populous coastal areas do, anyway. How they can do this in Alaska—also in Montana or Idaho for that matter—completely escapes me. I looked through the booklet that came with the papers. I can’t believe what I read there.”

Mrs F remarked, “Joyce can be exempt. She has a condition which reacts to exposure to cold.”

Jameson shrugged. “Okay, that’s good. But in Emma’s case we have a dilemma. Only the legal guardian can sign, and the Alaska legislature recently adopted a law about these Program permissions documents which provides civil penalties for not returning the signed forms—the legislature wanted to be certain that the schools had the parents’ informed consent before enrolling them. So that law only applies to the parental permissions needed to allow the child to participate. The law doesn’t go into anything about the Program itself, only the necessary permissions and consent materials. But Dr Clarke is currently missing and can’t sign any permissions. I called the school and they can’t or won’t make an exception. So in Emma’s case, there’ll be no parental consent or an exemption request. From what I can tell, that means they can’t select you, Emma.”

“But how can I get out of it permanently?” I asked, tears beginning to form. “I don’t have any medic... oh wait. I think I saw something about a reference to foreign... let me see. Oh. Here, page 5, see? It says under exemptions, ‘diplomatic status, international treaty.’ Does that apply?”

“Oh, good call, Emma,” Jameson replied. “Maybe. You’re a foreign citizen. If the U.K. says they won’t permit it, then the U.S. can’t force you. It depends on the details of any treaty the U.S. might have with the U.K. over their citizens living here. You’re on a L-2 visa, I recall. That entitles you to attend a public school free under the rules of the school, but I would think that you wouldn’t necessarily be subject to any non-education law imposed from outside the school’s curriculum, and the Program isn’t part of the state education curriculum. The law that created the Program isn’t under the federal Department of Education either; it’s under a separate federal office. And the feds can’t really dictate state education requirements. That’s controlled by the Tenth Amendment. Damn. I’ll need to research this a lot more. This is complicated.”

I nodded nervously. “Well, that’s why my trust pays you those big bucks.”

He laughed. “Sure. Okay, I’ll send a letter to your school explaining why there won’t be any parental consent forms returned for you, Emma. Let me know if they give you any grief over this, sound good?”

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Mrs F is a dynamo. Within a day, she had about twenty parents lined up for an informal meeting between them and, by the end of the week, had gotten the school and school board to arrange a formal meeting. She told me what the parents agreed to cover in the meeting with the school board.

“We looked at everything in the booklet. Everywhere there’s an issue that can affect a child’s health—like hypothermia for example, and personal safety, and right of privacy, we’re going to challenge. Many of the things they talk about here are violations of our community standards.”

“Brilliant. Sounds like a good plan,” I told her.

Meanwhile I hadn’t been idle. I had mobilized the “army” of kids that I had been tutoring and assisting in other ways as well. It had grown far larger than my initial twenty kids. I thought that if the school was going to try to freeze us kids by forcing us to be starkers, we’d freeze them out first. I asked the kids in my army to check with their parents and their parents’ extended contacts to see how they could cut off or limit any services to the school. Greater Fairbanks has a population of roughly 30,000, so I thought some kind of boycott could be mounted. Shut ‘em down first, right. Second, I did a little legal research myself. I looked at the Program law. This was interesting in what the law did *not* say. I looked at the sanctions the law provided. For pupils, the only sanction I could find was a *recommendation* in the law that the state must not allow those pupils who fail to participate to graduate. True, this was a strong recommendation; but I assume the federal rules couldn’t replace the state ones, based on what Mr Jameson had told me. I looked at state law. No law had been made about the Program save the one about the consent forms, so the not-graduating rule had to be a local school policy.

Finally, I decided to tell my army to spread the word to resist—if you’re selected, don’t participate. But while talking to a bunch from my army at a hastily-called “tutoring” session, I had another thought.

“You know, it’s way too cold to run around all bloody starkers,” I told them. Then I had to define “starkers”—it means completely naked.

“Those Program berks are crazy if they think that it’s safe if we’re at risk for getting frostbite. What if it’s too cold in school for us to be starkers? How would the school be able to explain frostbitten penises and nipples to our parents, anyway?” I joked.

That got a lot of appreciative laughter.

“Since it’s so cold here, forcing us to be starkers outside would be an inhuman punishment, wouldn’t it. Seriously, I wonder if there’s a way to make the building too cold so we’d need to wear our parkas. Mess with the heat somehow? Anyway, you blokes, spread the word to all your mates here. Let’s all refuse to strip off. If you don’t get naked, they say you won’t graduate. But you’ll have sat for all the classes you’d need, wouldn’t you. Yesterday I stopped at the admissions office at UAF and they said they’d accept a transcript that shows the classes completed with their grades. If the school refuses to give an official transcript, they’d accept a personal affidavit of its accuracy. Their office also rang up two other universities in the state and got the same answer. He told me that another option is the GED—I assume that’s a high school equal to graduating?”

One of the girls told me that I was correct.

“So our strategy will be to choke off the school. Let’s freeze the school out, if they’re trying to freeze

us. Get your parents and their friends to join in. Think of how to make the school officials really uncomfortable. At the beginning of that Program pamphlet, it says the Program's supposed to make us kids comfortable with our bodies. In Alaska, we do that with clothes, don't we!"

Laughter.

"And don't participate if they call on you to do it."

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The results of the school board meeting were totally predictable. As well, Mr Jameson went, recorded it with his mobile, and sent me a copy. One of the highlights was that a man, Mr Jack Hayward, was introduced as the school's Program coordinator; he had been sent here by the Office of Social Awareness, the national Program agency. From a comment I heard in the recording, I gathered that he must be extremely obese.

Hayward made a disturbing but telling comment; telling because now I knew just how crass the Program's officials could be.

"I've reviewed the exemption requests. None of them are valid and all were rejected," he announced.

There was a huge outcry and the loudest voice was from Mrs F.

"My daughter can't walk, let alone stand, when she gets those attacks," she called out.

"Oh, I think I know which student you refer to," he replied. "Our view is that unless the condition can be fatal, it isn't a health issue."

Another burst of objections occurred. Then Hayward spoke again.

"The decision of the Program office is that if a student is medically fit to attend school, then they're medically fit to participate."

After more outrage at this, the crowd eventually settled but only after the board president gavelled for order. Now only a background murmur of conversation was audible. Then I heard another speaker using a microphone.

"I'm Captain Roger Miller, the staff judge advocate at Fort Wainwright, sir," he began. "That means I act as the attorney for the post. I believe there are eight children who attend this school; their military parents live in this district and the post is roughly seven miles away. Our post's commandant has ordered the servicemen and women under his command who have high-school children not to sign or submit those forms. My office checked with the Pentagon; active-duty service parents are not subject to the Alaska law which mandates their signatures since those parents are under federal military orders. So our military families' children won't be participating."

Hayward spoke, "You can't do that. The Program law applies to all children in high school."

"Sorry, sir. It will be precisely as I said."

There was a smattering of applause and when it ended, someone brought up the question of sports participation. The board president responded.

"Obviously we can't require teams like our ski team to compete while naked. The same is true for the other outdoor sports. It's not safe for them; there's a risk of frostbite or worse."

Apparently someone raised a hand at this point and was permitted to speak.

Woman: "How is that different from the risk of hypothermia in a cold room? My son complains that

the rooms are chilly and drafty all the time. Without any clothing and sitting still, a child can get hypothermia pretty quickly.”

Hayword answered, “They’ll get used to the cold pretty quickly. Children’s bodies are very adaptable.”

There were shouts of objection and someone called out, “You should try it yourself! You get naked now! With the 300 pounds of blubber you’re carrying, you’ll have great insulation!”

The room was gavelled into silence by the board president, who spoke again.

“We’ve looked at the heat problem. This is Alaska and everyone is used to the cold, the kids especially. I see how they dress at the mall—very revealing. For the high school, yes, for those rooms that are chilly, we’ll provide some construction heaters. They heat a large area quickly. Yes, over there. Question?”

A man’s voice: “Are you referring to the portable propane forced air heaters? We use them all the time on my work sites.”

Answer: “Yes. That’s them.”

Man: “Then did you know they need a considerable amount of ventilation? They can’t be used in a closed-up indoors area. There’s a carbon monoxide hazard. And for the heater size needed for large areas, they’re very noisy. Won’t work in a classroom for many reasons. With kids around, they’re a serious fire hazard too. You’ll burn the school down. They’re not cheap to run either.”

Another round of shouting occurred and a voice could be heard above the noise.

“What about kids going naked between building sections? Those are practically unheated walkways.”

Hayword answered. “We considered that. We’re having fans put at the walkways’ doorways to blow warm air from the halls into them.”

“You do know that won’t help? There’s nowhere for the cold air to be blown away to!” was an incredulous response.

“We’ll look into that when the children are using the walkways,” he answered.

*Wow*, I thought as I listened, *they are being total berks about this*. The building was sort of organized in connected sections, covered with one big roof, with connecting hallways. Each section contained a specific department, with a little overlap in a few cases. So social studies occupied one section, science was in another, language arts was in a third. According to Hayword, a Program kid could be exposed to really cold halls for a while if they got stopped for one of those “reasonable requests.” Great solution.

Another person began speaking into the floor mike: “What’s the story about the children riding the buses naked or stripping outdoors? Aren’t they aware that this school is in Alaska?”

Hayword responded, “We sent a request to Washington to allow local discretion to waive certain rules like those. But you should be aware that up to now, no school has ever been granted a waiver of the fundamental Program rules. The school district is still trying to decide how to handle this requirement.”

Another person took the mike. “I’m Susan Masters with the Fairbanks Police Department. I will tell you here and now that the indecent exposure and public nuisance laws are still in effect here, and despite any federal desire to have them abolished, the city council has no plans to do so. I read in the materials you sent to parents that you plan to fail children if they don’t appear naked in places outside

school like the shops and the mall. If you plan to go through with this, the county prosecutor told our chief to arrest the school officials responsible and charge them with contributing to the delinquency of a minor. Just having that rule in your Program constitutes a Class 1 misdemeanor, since the CDM statute explicitly states that a child does not actually need to commit an act of delinquency for an adult to be charged with the crime. And each day that rule is in effect will be a separate offense.”

The board president responded that he would refer that question to the board attorney and finally closed the meeting by saying that the Program would begin on the following Monday.

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That school board meeting took place on a Monday evening in late October. I was listening to the recording on the following day, Tuesday. It was morning and negative 3 degrees C (26F) outside now.

During my third period class, I got a call to report to Miss Williams’ office. Bloody hell, what now?

“Hello Emma,” she said. “Relax, this isn’t about mental health counseling. I wanted you to know that we got Mr Jameson’s letter about your uncle not being able to sign your permission forms because he’s missing. We also must know whether you’ve received The Shot in the last three months. That form wasn’t submitted and all girls must be current with The Shot; over 90 percent of the girls on the Program will have sexual intercourse during their participation week...”

“Just one friggin’ second,” I interrupted. “I looked into details about The Shot. My docs, who are monitoring my hormones for the reason why I’m not growing, tell me that I *must not* take any hormones. And the ones in The Shot have been shown to interfere with those kids whose growth is affected by delayed puberty. I mustn’t take The Shot in any case.”

“Emma, your getting The Shot is not up to you; in the absence of your guardian, we’ll make that choice for you. As for all the other forms, you’re probably aware that we absolutely need a legal guardian to sign them, so I know that you’ll be happy to hear that, in your guardian’s absence, I’m making myself your legal guardian. I can do that because I’ve been your mental health counselor since you arrived here. I want you to know that I’ve signed your Program permission forms; I will sign your consent form for The Shot, and you’ll be selected to participate in the Program soon. I think you need it; it will let you come out of your shell.”

No doubt about it, I was gobsmacked. “Erm, miss, I doubt you can do that.”

“No, it’s done, Emma. That’s all I need today. You may go.”

I went. Straight to a quiet place, and called Mr Jameson, and told him what happened.

“She can’t do that by herself, Emma,” he told me. “Normally there has to be a petition to a judge in family court, CPS needs to investigate, and then a hearing has to take place where the parties appear to provide evidence supporting or challenging the petition, before a guardianship change can be granted. She probably just filed the petition. I’ll check and let you know.”

Later that day I got a text.

*“She filed a petition. I had it quashed since you already have a guardian.”*

When study hall time came, I met with my gang of kids I tutored. But instead of tutoring, the session turned into planning how to interfere with the school’s rollout of the Program.

“Has anyone thought of how we can make it really cold in here?” I asked. “You know, freeze it out? Maybe if we can figure out how to get the heat turned off, it could work, but we only have a few days before the Program starts. Can we get a bunch of windows open somehow?”

We discussed how to do that but we couldn't figure out how to keep a lot of open windows from being noticed and everyone vetoed the idea of breaking any windows. Then another bloke in my army told us that he had a possible plan but all the details hadn't been worked out. But we all resolved that everyone should resist if they were picked.

On the Wednesday morning, Principal Norris announced that the first school-wide Program meeting would be Monday and it would be in the gym, where the first group of selected participants would strip. The entire not-quite 1,000 pupil body couldn't fit into our auditorium but could fit in the gym, albeit if many kids sat on the floor or remained stood.

### Chapter 3

The week passed as plans continued to be made, definitely on the part of my army and probably on the school's part too. School officials had lots of things to organize, amongst them how they could adapt the general Program rules to an Alaskan environment. On Friday during home room, they played a really horrid video over the classroom monitors which, during the first boring five minutes, showed talking heads extolling the psychological and social benefits of the Program. After that rot, there were clips of news programs where the TV commentators discussed the changing mores of society; that public nudity was becoming more socially acceptable. They showed clips of naked bike rides, naked beaches, bodypainting festivals, and naked attendees at rock concerts.



*Scenes shown on the video: naked hiking, biking, streaking, and beaches*

Then some more talking heads came on, discussing how nudity was becoming commonplace in colleges and universities and illustrated this trend with examples of naked events at various colleges. Clips were shown of students at one uni holding a naked run; at this school they do this on the 13<sup>th</sup> of every month (and for special occasions, also on the 31<sup>st</sup> or 26<sup>th</sup>). Another clip was of a festival at a different

college which featured, among its events, naked attendees engaging in body painting and performing symbolic “deflowering ceremonies” where naked participants frolicked and danced around naked girls, who supposedly were the virgins. Also clips were included from yet another uni which holds an official “naked week” as a celebration of body positivity; various events were shown, including a naked Ultimate Frisbee game.

There was a bit more discussion about the importance of body positivity and then the narrator began discussing what she called “sexual positivity,” trying to justify how it was important for teens to become sexually experienced as part of becoming emotionally mature, and while she droned on, the screen showed disturbing pornographic video clips of kids doing all kinds of gross things with each other in school hallway and classroom settings. From the squirming of the others in the classroom, the video was making everyone uncomfortable and it freaked out not a few girls, a couple who began to



*The boy in the video had to masturbate in front of the room    The video showed a couple in coitus; here they are in foreplay*



*The video ended with another couple in coitus, scaring its viewers*

cry. Me? I was frikkin' disgusted. And who would model for that kind of video? Wait... were those kids actors or was this the real thing actually going on in a school? Ugh, now that's *really* horrid. I don't want to even think about it. Seeing that video really freaked me out.

Then the weekend came and went, and Monday arrived. That was the only thing I had expected to

happen which actually *did* happen. Monday arrived. The Program assembly didn't, and absolutely everything else that happened was unexpected. Well, not in the form that anyone, including me, expected. Let me clarify.

The school halls were bloody cold when we arrived on Monday morning—damn, how did that happen, anyway? That's just perfect—exactly what we needed. It was snowing outside too. I went into my classroom and it was even colder in there than the halls. Could that be because there were open windows in the room, snow was blowing in, and the air coming in the vents wasn't very warm? We got the windows shut but kept our coats on. We had expected to report to the gym after home room but then the PA announcement came:

“There will be no meeting in the gym today. Please stand by for more instructions.”

There was a buzz of conversation over this when a latecomer arrived in the class.

“My bus was late,” she reported to the teacher, handing a note over. Then she turned to the class. “We got delayed by a crash ahead of us on the way here. Slippery roads. Anyway, do you know that one whole wall of the gym is gone? The one that was all windows. The gym is open to the outside and the snow is blowing into it.”

The whole class erupted with a cheer. Things were off to a roaring start. Freezing start? Whatever. A few minutes later, a girl brought a message into the room and gave it to the teacher. She read it and looked up.

“Adam Rich and Emma Clarke. You’re supposed to go to Room A103A now. That’s the little conference room next to the school office. Take your stuff with you, too.”

Now what? I wondered. Adam was a junior like me. He was smart, very shy, and, well, somewhat overweight. And tall. Two meters? Six feet four or five, anyway, to my four-ten and a bit. A gentle giant. So we trundled off to Room A103A.

As we arrived, there were others coming to the room too. It looked like there were perhaps a dozen kids, maybe a few more, plus a few teachers, arriving. And one very obese man was stood inside. This must be the infamous Mr Hayword. I had to give my name to a woman with a clipboard as I entered the room where I got pushed against people who all towered over me. Oh, that room was cold too. Everyone was wearing heavy coats or parkas. Me too. Goose down parka for me. Soon the clipboard woman nodded to Hayword; she left and shut the door and Hayword began speaking.

“Welcome everyone,” he said. “Sorry for the tight accommodations here. There’s been some damage to the gym so we couldn’t meet there. You students are honored to have been selected as your school’s first participants in the Program...”

There were howls of outrage from everyone at this news.

“You can’t do that; it’s too cold,” cried one.

Another voice called out, “You gotta be nuts—nobody here wants to freeze to death!”

The clamoring continued until he got the noise quieted down; then he said, “You’ll get used to the cold; you’ll see. We’ll be doing partners for the Program. Miss Williams will give you your partner’s name. You are to support each other during your week. Miss Williams?”

After another round of distressed complaints, she was able to speak.

“We’ve selected two pairs from each class; we want to get through the first part of the student body quickly, hopefully before the winter gets really bad. There are two girls who must go to the nurse to get The Shot right after you’re naked. Michelle Geist and Emma Clarke. Be sure to see the nurse and tell her you need The Shot. Now here are the partner groups...”

She continued, starting with the freshman, but by then I had tuned her out. What to do? No bloody way will I get starkers. I noticed that I was virtually invisible in the room, being shielded from view by all the huge bodies around me, most of them wearing those fluffy Alaska-style parkas. But I was too far from the door to slip out.

“Go stand with your partners now.”

Wait. What? I didn’t hear my name or anyone else’s. People were shuffling around and then Adam moved next to me.

“Adam?” I wondered aloud.

“Partner,” he muttered, carefully inspecting a dirty spot on the floor from his towering height.

There were lots of dirty spots on the floor so he had ample opportunities for his curiosity about them. Hayword was talking now, something about Program rules, when Williams sidled over.

“Emma, I paired you with Adam. He’s as shy as you. You can help each other.”

“Bloody hell, miss,” I countered. “He won’t be my partner because I’m not doing this rot. Anyway, he’s four years older and I don’t do anything social with boys either. And I checked on you. You’re *not* my guardian, so that consent form is invalid. My attorney told me last week that your guardian

application was thrown out.”

“We can force you, you know,” she replied. “In just a few minutes.”

Hayword must have wrapped up his comments because everyone was shifting around restlessly again.

Then Hayword announced, “We’ll start with the seniors. You four, please remove your clothes now. Um, there’s no room in the clothing boxes for your coats—just pile the coats in the corner over there for now.”

The four seniors looked at each other. I was stood near them so I could hear one of the boys as he quietly asked the girl next to him, “We’re not doing this, right?” Both girls both looked back at him and nodded their heads in agreement.

“Hey, me and Jane and Nancy aren’t doing this crap, no way in hell will we strip, and it’s too damn cold anyway,” that boy proclaimed, grabbed a girl’s arm (Jane or Nancy, I didn’t know), and charged out of the room with her in tow. Immediately most of those kids near the door ran out as well, before a teacher was able to move to block anyone else from leaving. Naturally, I was too far from the door to get myself out in that initial rush and Adam was still counting dirty spots on the floor.

There were just five of us kids left in the room now. I think three were freshmen, Adam, and me. Williams zeroed in on me.

“Okay, Emma. We’ll catch up to the others soon, but now it’s your turn. If you don’t strip voluntarily, we’ll need to help you do it.”

Two of the teachers in the room began moving toward me, they were probably gym teachers since they looked like it—big men. Well, everyone looks big to me. Okay, time for the drama act.

“I can’t do it...” I sighed dramatically, rolling my eyes up and making my knees shake.

Nah, that won’t work—I’m bundled up so much that they can’t see the knees. So with a theatrical sigh, I keeled over. My parka gave me great cushioning; I landed with a very satisfying *thud*. As I did, I made sure to slap the floor hard with my hand as I made believe it was my head that made that *crack* sound. Anyway, I bounced my head to make it look real.

Damn. I had slapped the floor, dirt spots and all. Gonna have to scrub the dirt off my hand later.

Anyway, at least something worked properly for me now.

“She fainted!” A female voice.

“Get help!” A male voice, young though.

“Step back!” A male command, a teacher probably.

“Get her to the nurse, Mr Greynor.” That was Miss Williams.

“You all, stop! Stay here!” Hayword, probably trying to keep the last of the kids from leaving the room.

From the thudding of the feet vibrating on the floor, it seemed that they all successfully fled. Whilst I was being carried to the nurse, I tried to practice rolling up my eyeballs in case someone lifted my eyelids. Don’t know how well that worked, though. I couldn’t feel them move very much. Oh well, I’ll need to wing it now. If I can get alone, I can get away. I’m just too small to get away from someone if they grabbed me.

I was deposited, not so gently, on a firm surface—the exam table, I assume, and a female voice asked,

“What happened to her?”

Gruff male voice. Teacher-coach, I assume. Used to yelling. “She fainted.”

“What was she doing?”

“The first day Program stripping session. They asked her to strip and she keeled over.”

“Ah. Shock.”

“Um, Marcia?” Oh. That must be the nurse’s name. “She hit her head on the floor, hard. Heard it go crack.”

“Ohmygod. And you *carried* her here with a head injury? Get out. Call 911. Wait for them and lead them here. Let me check her.”

I felt her hands gently slide over my scalp and heard her breathing close by and a few seconds later, she began checking my pulse. I guess she had tried looking for a lump or bleeding on my head. Then I felt a blood pressure cuff being put on my wrist.

“Hmmm. All okay,” she muttered when the cuff stopped hissing.

Then she lifted an eyelid. I tried really hard not to look back at her, keeping my eyeballs up. Suddenly a bright light flashed at the eye and went away. She repeated it with the other eye.

“Pupils okay. Miss, you’re awake. You’re not fooling me.”

“Oooohh,” I groaned. “What happened? Oh, it hurts. I hit my head.”

“They said you fainted. What really happened?”

“Ooohh... they were gonna strip me. I felt all woozy and light-headed and then woke up here. Ow, my head hurts.”

“Hurts where? I didn’t see a bruise.”

“My hairline. Here.” I pointed.

“Okay. That area may take a while for a lump to form. The skull is really thick there. You might have a concussion; we’ll need x-rays, maybe.”

“If they take me to the hospital, where’s my backpack?”

“It’s right here.”

The phone rang and she answered it. “I’ll tell her ... Okay.”

She came back. “The office called your paren... emergency contact. Mrs Flannery will be here very soon.”

In fact, Mrs F came in when the paramedics did. I motioned her over and she bent down for my whisper.

“I’m okay. Play acting. Be quiet. Go along with me.”

She nodded.

“How you doing?” one of the EMTs asked.

“Better. Getting better and better.”

“That’s a strange answer. Hurt anywhere?”

I glanced around; didn't see the nurse.

"Not really," I replied.

"Report is you fainted; possible concussion."

"Okay," I responded. "But no concussion."

He gave me another sharp look.

"Okay miss, let's get you on the gurney here."

Soon they were loading me into the ambulance. I saw Mrs F was stood at her car, waiting. Whilst I was being loaded in, I released the restraint strap at my waist. The other EMT pulled a clipboard off my stretcher, looked it over, and then began securing the stretcher wheels to the floor. The first EMT was apparently the driver.

The door closed and I sat up.

"Ah-ah-ah! Can't do that," the EMT spoke.

"I'm fine," I said. "I just needed to get out of the school building and..."

"Now wait," he interrupted. "You have a possible concussion and..."

"Ready to go yet?" the driver called back.

"Not yet. A minute." To me, he said, "You need to lay back."

"No." I stood up then, surprising him. And in my best parade-field voice, firmly said, "I'm done here. Now you listen up, Mister! There is absolutely *nothing* wrong with me! Except my height," I added quietly. Firmly again, "They were assaulting me in there, going to try to strip my clothes off me! So I faked the fainting! I'm fine!"

He gawked at me, then looked back at his clipboard.

"Hmm. Your name rings a bell... Emma Clarke. Emma... do you tutor kids here?" he asked quietly.

I glanced at his name tag. Benalley. I taught an Amka Benalley.

"You have a daughter Amka?" I asked.

"Yes!" he shouted. "You're Amka's Emma! She thinks you walk on water. You helped her pull up her grades, taught her how to study, gave her confidence in herself, made us all proud of her. You're her hero and role model. I heard of that school nudity crap. They got you involved in that? How are you even in high school? At 13?"

"Wait. One at a time. Yeah, they fixed the name selection so that I would be selected today. Then they were about to force-strip me, so I faked the fainting to get away. I'm in high school 'cause I skipped some grades when I was younger. And I need to call my solicit... erm, lawyer about what happened today, so can you let me out? I can see that my ... erm... guardian's car is still waiting. She's probably waiting to follow you. Let me out—you can tell your bosses that I skipped out when you were getting out an IV or something," I giggled.

My relief at escaping was making me giddy.

"Don't worry about that, Emma. I'll cover for you." he said. "Hey Bill!" he called. "I need to come up front for a sec. The patient is stable."

He opened the back door and we both got out. He closed it and went to the cab whilst I slipped into

Mrs F's car. She had my backpack.

"Okay now, what's going on?" she asked as the ambulance left. We drove out too.

I explained.

"I need to call Mr Jameson. First, can they use force to strip kids? Second, if the law says that only a parent or legal guardian sign the Program releases, how could Williams do it? Isn't that illegal?" I asked.

"I don't know, honey," she sighed. "Let's just get home."

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When we got home, I called Jameson and he told me he'd get right on it; Hayward telling the teachers to strip me was actually a felony—sexual assault. Sigh. This was only Monday, I was guessing we'd have a whole week of this rot—no, probably more. Soon Joyce came home from school to report that no one had gotten naked and that the building was still majorly cold.

"They boarded up the windows in the gym and have these big heaters running in there now," she told us. "They're trying to get the building heat up but one of the kids heard the janitor saying it would take three or four days to get the heat much over 60. And the gym is losing heat as fast as they can pump it in. Everyone is so excited about how the Program got stopped today."

"What about the kids who got selected? Were they bothered anymore?" I asked.

"I know of some. Two were in my fourth period English class and Hayward came by and demanded that they come with him to get stripped. They refused again. Robin knows of more. Hey, I heard a girl fainted."

"Erm, that was me, Joyce."

"No shit! They picked you?"

"Yeah. They falsified my consent records. And the selection isn't random like they said it would be. And I didn't faint. I pulled that trick to keep the teachers from stripping me."

"No! Can they just pull off your clothes if you refuse?" she asked, horrified.

"No, doing that's assault and battery. Jameson got a court order to keep them from trying it on anyone."

"Ooooh, cool," she said. "Hey, Robin told me that a couple of teachers are being real dicks. She had a kid who was called for the Program in two of her classes and each teacher wanted him to strip 'cause they wanted to use a naked kid in their class. He refused, of course, so she said the teachers tried sending him to the office. He wouldn't go; he said that's where it all had started. So the teachers told him that he would get a week of class fails; that's what their Program instructions called for, they said."

Robin was a friend of Joyce.

"Jeez. That's just bollocks. I'm sure they can't fail a kid for a non-academic reason. I think I'll warn the kids in tutoring to watch out for that if they get threatened that way."

"I'll tell Robin what you said, Emma. Thanks!"

Later in the afternoon I got an email from a girl in my army.

Hey Emma—

Thought you might want to know. Jeff's dad runs a window and sign company. He and his crew took down the gym windows last weekend with their bucket trucks. Then they put someone into the school through the window opening and he opened as many doors and windows as he could.

Pat says his uncle has another surprise for the next time we need to freeze out the place. When the school goes over 60 he'll do it. You *did* said to freeze 'em out—that was a super idea. We're absolutely gonna do just that.

Kasi

The school was still chilly but mostly quiet when I returned Tuesday. Apparently the staff had been trying to get the selected kids to participate all day Monday but the kids stood firm. The cold building went a long way to help steel their resolve. You freeze out the Program by freezing the friggin' kids. Even if anyone had wanted to get starkers, the school's temperature would have chilled out that thought, and any teachers who asked the kids to strip were met with cold stares. Just sayin'. Need to find humor in this rubbish somehow and thinking up the puns helps. Anyway, Williams must have found out I was back because she tracked me down and tried to talk to me, but I just walked away from her and then wouldn't even acknowledge her when she tried a second time at my next class.

I have Biology fifth hour on Tuesdays and guess what? The teacher had me on his list as a Program person and gave me a really difficult time, insisting that I had to be naked so he could use me for some class demonstrations.

"The devil?" I retorted. "What is it with you teachers? Acting like a crew of pervs—you just wanna get to see a bunch of us kids, all starkers, don't you."

The class erupted in cheers.

"Miss, you're being..."

"I'm being realistic. No way you'd support this blightin' Program idiocy unless you were perving on us kids..."

He tried to interrupt but I stood up and pointed my finger at him.

"Tell you what... I'll do it, but only if you join me in stripping starkers and you go first."

Now the class was howling with glee and the teacher looked like he was about to have a coronary.

"Miss Clarke, that's enough. Your behavior is..."

"It's bloody appropriate," I exclaimed. "Look. This classroom is what, only a bit over 60 degrees and everyone's still wearing coats or heavy sweaters. Being starkers in the cold like this is a spacky idea; it's dicky too..."

I saw his blank look and realized my slang had lost him.

"...so... means stupid idea and unhealthy. Last week when I heard about the bleedin' Program starting here, I looked up some survival tables for hypothermia. Guess what? They all assume you're wearing clothes, don't they. You'll get hypothermia right quickly, even at 60 degree temps, if you have no clothes on. And at my body size, the ratio of my body surface area to my total mass is much higher than a full adult's, so that'd mean that I'd lose body heat very fast and be affected much more quickly than a bigger person, innit? So you can just forget about my being starkers in here. Sir."

Got quite a bit of applause for that, I did. Which earned the class a hard glare from the teacher, but he did back down and I didn't have any further problems with him for the rest of the term. And my

reputation among the kids at school took a tremendous leap after the news about that biology class spread widely. Suddenly I was popular! What a hoot.

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Mr Jameson works quickly. After my Biology class, I noticed I had a text message from him; he had organized an ex parte court injunction issued to the school forbidding any adult from touching a student for the purposes of obtaining Program compliance. Any adult doing so would be subject to a sexual battery charge. He had also sent a letter to the school demanding that they send him the original copies of my Program permission form which Williams had signed. In the letter, he had pointed out that she had violated state law by falsely representing that she was my legal guardian. And finally, he had notified the school that under no circumstances were they to attempt to administer The Shot to me.

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My afternoons on Mondays, Wednesdays, and Fridays are spent at UAF, so I missed some of the byplay on Wednesday afternoon. But while I was at the uni, the school district's lawyer was in court attempting to get Mr Jameson's injunction overturned. I learnt what happened from him that evening.

"Emma, I called to update you on the school nudity situation. I was in court today to defend our ex parte injunction," he told me.

"Ah. I hope you won—erm, what's 'ex parte'?"

"That means I got the preliminary injunction without any notification to the school. Doing that is justified in cases of immediate harm, where there's no time to arrange a hearing with the parties. Anyway, yes, we won; the injunction is now permanent."

"But the school's lawyer tried to stop it?" I asked.

"And that was ... amusing, ha ha... to see. Their lawyer got a lecture from the judge. The judge used my motion for relief as his script. When the other lawyer tried to introduce the Naked in School Program materials as a reason why forced stripping is legal, the judge threatened him with contempt for making a frivolous argument, since those materials have no legal standing. He asked the guy how he thought an administrative document, which has no basis in state law, could supercede the state's laws covering assault and battery. In my motion, I had pointed out that allowing the forced stripping of minors, like the school officials attempted with you, would give them free license to violate the assault and battery laws. Follow so far?"

"Yep. So we're okay?"

"Yes, but there was more," he went on. "Their guy then brought up school corporal punishment and pointed out that this was permitted in a number of states, where it was exempted from being battery. So I challenged that comment and told the judge that corporal punishment was prohibited by law in Alaska, but in those states where it was allowed, that kind of punishment was limited to serious behavior issues where student suspension was the alternative and spanking or paddling was the only allowable punishment—not stripping children naked and forcing them to remain that way. So legally, I claimed, kids could not be stripped by force. The judge agreed and made the injunction permanent."

"And the teachers know this, then?"

"Yes. Their lawyer—he's in private practice, just like me. He's not a school district employee—he's on retainer to the school district so they pay for his time by the hour. He told me after the hearing that he really didn't want to go to court over this. He told the school district that there was no way he could get the injunction overturned." Jameson chuckled. "Just like he couldn't do anything about the local

indecent laws about having naked kids in the mall. The school had him try to get those laws changed too and the city attorney just laughed at him.”

“Oh yes,” I commented. “That rot—‘outreach,’ I think it was called. I saw that was gone from the new version of the Program booklets we were given.”

“Their lawyer told me that Hayword wanted to require that the kids be naked at home since he couldn’t require it in public. He had to convince Hayword that doing this was impossible. There was no way the school could force a parent to change their household rules. So that’s the news. Have any problems since Monday morning?”

“Not really. A few very insistent teachers who were after me about why I wasn’t starkers but I got shot of that fairly easily.”

“That’s good. Oh, I almost forgot... In my letter to the school about your not having a guardian’s consent and being chosen, I mentioned that as a U.K. citizen, you couldn’t be chosen.”

“That’s ace, thanks.”

“Well, call me if something comes up, okay?”

“Sure will.”

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Something coming up didn’t take long at all. The very next day, Thursday, I got called to the office. I responded that I wasn’t showing up unless they assured me that they weren’t trying to strip me. They said they weren’t. So I told the principal that I’d come to the meeting but my mobile would be connected to my attorney’s office and if I had any problem with them, the attorney’s secretary would ring 911.

And that’s how I did it. I was gutted to see who was in the room, Principal Norris, Assistant Principal Smith, Williams, and Hayword. I wasn’t about to answer anyone’s questions, no sir. I needed to take charge here.

“Him,” I said, pointing at Hayword. “If he’s here, my mouth is zipped. He represents all that is wrong with this bloody idiocy. I want him gone.”

“But this meeting is about the Program and he’s in charge of it,” Norris objected.

“As far as I’m concerned, there’s no Program happening here, so no worries,” I shot back. “Either he’s gone or I am.”

I saw Smith try to hide a grin.

“Okay, you can ask away all you want after he’s left,” I went on. “That’s when my answers will come.”

“You can’t do that,” Hayword said. “You have to respond to legitimate questions.”

“Really? This isn’t a police matter and I’m assuming that this meeting doesn’t involve my academics or any disciplinary issues, which are covered in the school’s ‘Guide to Student Behavior.’”

Hey, I looked this stuff up. Helps to be prepared.

“The ‘Guide’ says that students need to be respectful to teachers and staff,” Norris said, warningly.

“Tell me what wasn’t respectful, please, Mr Norris.”

“Talking about Mr Hayword that way and refusing to answer.”

“Okay. He isn’t a school teacher or staff member. He’s a federal employee and isn’t subject to the school board so his being at the school is a courtesy. He’s not an education person. He’s an outsider. He shouldn’t be here. Also, you certainly know that someone can be respectful whilst refusing to answer something. You people do know about the Fifth Amendment, right? People don’t have to answer, do they.”

Norris looked at me with the stern expression he uses on kids, trying to scare me, I assume. It’s actually an impressive stare. Maybe I can figure out how I can do that too. But I just looked back at him blandly, then winked. He sat back suddenly, shocked.

“Miss Clarke, that was impertinent! What kind of game do you think you’re playing?”

“What? What did I do?” I complained. “Did I do something wrong?” I asked the others, innocently. They shrugged. Smith was looking at me with a strange expression now.

“You *know* what you did! You *winked* at me!” Norris shouted.

“Oh? I did? An eyelash got stuck when I blinked, is all. Why would I wink at you? You’re not my type.”

The others in the room sniggered but Norris’ face turned red, he stood up, pointed at the door, and yelled, “Get out. Get out now! And I’m going to have you expelled!”

“Okay sir. But first, please look at the rules about expulsion. My lawyer is enjoying helping me with the problems I’m having here. He likes the money too.”

Now the laughter from the others couldn’t be suppressed. But Norris, beet-faced, looked like he was having a stroke.

“*Out!*”

I waved daintily as I slipped out the door and gently closed it. A few seconds later I heard laughing coming from my mobile. It was still connected to Jameson’s office. I put it to my ear; Jameson was laughing and I heard laughing in the background.

“Hi. Did you enjoy that?” I asked.

“Emma, we all heard that. You should get an Oscar. I think the visuals would have made it even funnier. I would have loved to see their expressions. That was a masterful job at showing them that you’re playing by your own rulebook.”

“Yeah. That’s kinda what I was going for. I had assumed, when I walked in there and saw the lineup, that they wanted to ask me about the school sabotage and my role in the resistance and I wanted to try to stop them from even asking one question about that.”

“As I said, masterful. Okay, thanks for the entertainment. And keep safe, you hear?”

“I’ll try.” I rang off.

‘Cripes. It’s still cold in here,’ I thought as I walked back to my class.

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Later on that same day, I heard about what happened in the office after I left the principal’s meeting. I didn’t hear about it from any expected source, either. I was doing one of my group tutoring sessions when one of my... well, I started using military metaphors for my army group, so it was when one of

my lieutenants—ah, you do know that’s the word’s proper pronunciation—Karen, popped in. She had news so exciting (to her) that she was positively vibrating. I excused myself from my kids and the two of us went to a quiet corner.

“Emma, you just gotta hear this!” she gushed, her body vibrating, jiggling, and quivering.

She had her mobile out and could barely hold onto it.

She quivered, “You know how you told us to keep aware of what the staff says; their words are ammunition for our cause; loose lips sink ships...”

“Karen... shhhh... okay...” I slowed her down. Shit, this military metaphor tosh must be contagious.

“...and... and... umm... you know Marta?”

She had run down a bit. Fifty percent quiver reduction.

“Yep. Teacher’s aide in the office.”

“Okay. Wow... She... she... Oooo...”

Oops. Quiver rate up to 75 percent now.

“Slow down. Deep breaths. What about Marta?”

This was probably going to be the gossip scoop of the century... no, millennium. (Uh oh. Same thing. Damn. There goes *that* hyperbole.)

“Yeah. *Puff puff*. Okay. Um. Well. So she was in the teachers’ lounge, crouched behind the sink cabinet, putting in the stuff from the supply closet, when a secretary and a teacher came in jabbering, and one was saying ‘You won’t believe what I just heard about that Emma Clarke girl...’ Well, that triggered Marta so she grabbed her phone and started recording. Aaaand... I... have... a... copy... right... heeere!” she almost squealed and began vibrating again.

God. How these kids just *love* good gossip. I wonder if I’ll get that way when I grow up? Anyway, she began to play the recording. The sound was tinny and a little blurred but was certainly understandable. I assumed the first voice was the office secretary.

Secretary: “... came out and quietly shut the door...”

Teacher: “You mean Emma.”

Secretary: “Yeah. Norris had screamed ‘Get out’ and ‘You’re expelled,’ and stuff like that. Then she kind of floated out of the room with a little smirk on her face and daintily shut the door. She even winked at me.”

Teacher: “She’s a cool one. Gotta watch her.”

Secretary: “I know. But here’s the best part. Now they were all shouting in there so I could hear them. Smith said, ‘Paul, calm down! You know that she played you like a goddamn fiddle, don’t you?’”

Teacher: “Paul Norris, the principal.”

Secretary: “Right. Now I need to paraphrase because I can’t recall what they said word-for-word. Norris said, ‘She’s impertinent and obstructionist. I don’t want her in my school.’”

“Smith came back with, ‘She did nothing that you can punish her for. You know, right from the instant she came in here, that she was in total control of the meeting?’”

“‘I don’t see that,’ Norris said.

“Smith said, ‘She went on the attack, her very first words. She looked at who was here and figured us all out instantly and attacked, right to the heart of where we planned to go with her. She’s scary, like a mind reader.’

“Then Norris. ‘You mean, her demanding that we send Jack out?’

“‘Right, that took our attention off of where we wanted to go, and then she turned the meeting into a discussion of whether or not she was being polite. Shit. Then she baited you and you took the bait and ran with it. Threw her out. Just what she wanted. And now she has grounds for refusing to meet with us again. Sorry, Paul, you blew it. Do you know how powerful that kid is here? She may look like a little girl, but she’s probably the most underestimated person you’ll ever meet. About a quarter of the kids in the school think she’s a god or something. I know many parents do.’”

The secretary continued: “And after that, they got too low to hear. The others had been speaking too but I couldn’t make out what they said. Oh and then...”

There was a sound of something falling, then, “Oops.”

Teacher: “Someone there?”

“Just me, Marta. I’m stocking the cabinets.”

Teacher: “Did you...”

The recording stopped. I must have been blushing because Karen looked at me and giggled.

“Jeez, Emma, your face is red. Are you hot or something?” she asked, grinning.

“No, I’m ace. That talk about me is embarrassing though.”

“But it’s so true! I’m keeping that recording forever!” she gushed. “You’re not only a genius; you help everyone, protect us all, and even slay the dragons. Putting the mighty Norris down! My god, nobody’s ever done that! And he’s been here forever!”

You can see where this was going. I made Karen promise to try not to share that recording too widely, but you know, teens and gossip, well, I won’t hold my breath. Maybe it might be better if they do kick me out of here. No, I guess not. I’ll stick it out.

By Friday, the rooms in the school were right around 63 degrees on average, except the gym. Plywood has a poor insulating value, especially when compared with the triple-pane glass which had been there previously.

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After a calm weekend, when I returned to school, once again the school’s temperature was somewhere between that of a refrigerator and freezer. Through my army’s grapevine, I learnt what had happened this time. This attack was apparently a two-pronged offensive (there I go again). First, a nameless someone had somehow released some natural gas near the school building’s meter, resulting in the utility company responding and shutting off the gas supply until the leak could be found. This ploy began on Friday evening, and after some repeated releases of gas in a few random locations near the meter, thus requiring additional utility company visits, by Sunday no leak had been located—but the gas, and therefore the school heat, had been turned off the entire time. The second prong was that someone had gotten onto the building roof and opened the makeup air baffles, allowing the ventilation fans to pull in outside air. Normally the school’s heating systems used less than about 5 percent

outside air and recirculated the rest; that's what I heard. Now they were pulling in 75 to 80 percent fresh, frigid air. Freeze 'em out. But we were the collateral damage 'cause we froze too. I was glad for my parka.

When the Program selectee names for Monday were read over the tannoy—that's the PA system—all the classrooms broke out in sounds of laughter and jeers.

I was at home that afternoon trying to juggle my school homework and my uni course work when I heard Joyce noisily come into the house with some friends. They passed the dining room doorway and noticed me.

"Oh! Emma! You're here now," Joyce said, surprised.

On Monday afternoons I was usually at the uni.

"Just catching up on all my work," I answered. "The prof is out sick today and he didn't have a sub."

"You know my friends, Wendy and Robin?" she asked.

"Sure. Hi there. Keepin' warm, are we?" I joked. "Hey, Joyce, how are you holding up with the school being frozen like it is?"

"I'm okay. I wear lots of layers. If I keep my legs warm too and wear a hat, I'm okay."

Robin broke in, "Yeah, they relaxed that 'no hat' rule now since it's so cold. Hey, Wendy's name was picked today. You hear it announced?"

"Yep. Hey, Wendy, you're now a member of the refuser's club. And your other friend, Jeannie, got called too."

"Well, the whole school thinks you're the greatest, how you've stopped the Program," Wendy gushed. "I'm so, so glad I don't have to do that naked crap. You guys were geniuses, the way you figured out how to make the school so cold. And my uncle is loving it too," she giggled.

"Oh, keeping it cold... that reminds me... I gotta get with my gang to figure out how to keep the building cold for the next few weeks. We're running out of ideas," I mused.

My housemate, Sally Iverson, came in just then. "Hi guys, what's up?" she greeted us.

Joyce grimaced. "Just commenting about how they're keeping the school cold."

"And what we can do about keeping it that way," I put in.

"I heard a bit of what you were saying," Sally remarked. "Wendy, what's making your uncle so happy about the school being cold?"

"Oh, he works for Jones Plumbing and Heating. He's the supervisor. They have the contract to take care of the school's heating system and with all of the stuff going on, he's getting lots of billable hours at the school."

Hearing that, I had an idea. "Oh... oooh... Wendy? You think he could help our cause? Maybe if we got access to the controls... we could figure out something. Without involving him, of course. Sally, if there's something electronic that we could do, would you help?"

She laughed. "Oh sure. The stuff goin' on at your school is epic. And the way you're fighting back? Awesome. If I can help, sure."

Wendy got her mobile from her backpack and rang her uncle.

“Uncle Ray, it’s Wendy. Got a question.”

“...”

“No, about the high school—let me put this on speaker. There. A bunch of us here were wondering if you could help us with keeping the school cold...”

“Hold on, Wendy, I can’t do anything that...”

I interrupted, “Hi, Uncle Ray, I’m Emma—a classmate of Wendy’s...”

He chuckled. “Ah, the famous Emma. Wendy’s mentioned to me what you’ve been doing. Just call me Raymond, Ray’s good too, okay?”

“Yes, sir. Here’s the idea I had, and you wouldn’t be involved other than giving us some info and maybe allow us access to the system. We wouldn’t damage it in any way, that I can promise. One of our helpers is an electrical engineer, a grad student. She’d know what to look for.”

“Well, I could do that, especially seeing the good cause this is for, I suppose. What do you need?”

“Raymond? Sir? I’m Sally Iverson—who Emma graciously called an electrical engineer. That’s my bachelor’s degree but I haven’t done enough field work to earn the ‘engineer’ title.”

“That’s okay, Sally. If you know how to read circuit diagrams and what the components look like...”

“Yes sir, I know all that. Anyway, for starters, could you tell me about the controls? Is it an integrated package system or distributed controls?”

“You asked the right question... good. That makes me feel better. It’s new; well, four years old. That’s when we put it in. All digital. Everything controlled from one box. Let’s see, it’s a Heat-Timer system...”

He and Sally continued their discussion for a few minutes, then we said our thanks and good-byes and disconnected.

Sally turned to me. “I’ll get the service manual off the internet. Ray said it’s there. After I look it over, I’ll know better what’s possible.”

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On Tuesday, I learnt from Mr Jameson that Hayword had been busy. Apparently he had contacted the Office of Social Awareness in Washington to tell them that he had a U.K. citizen in his school and he wanted the U.K. embassy to permit him to compel me to participate. Well, the embassy responded that they would need to investigate this further, so they would contact the nearest consulate office to look into the situation. The nearest one is in Anchorage. So the consulate contacted Jameson, whom Scott had listed as our legal agent. They didn’t want to spend the money to fly someone up here, especially with a bad spell of winter weather in the forecast, so they arranged for a video conference. We would do that in the Communications Department at the uni in a week.

The school remained quite cold for much of late October, but by the beginning of November, temps were threatening to climb back to the mid-60s, so our freeze-‘em-out campaign went into action again with the next planned operation. Our objective was to keep the school so chilly that everyone would need to wear at least heavy sweaters indoors. So we started November off by keeping the school at temps under 63 degrees through the nefarious interference with the heating system itself that we had planned a few weeks prior.

Sally had downloaded the system’s manual from the Web, found that it had Bluetooth capability, and

learnt how to enable its portal. Ray helped her to get access to the system by loaning her a company jacket and taking her into the mechanical room, which had an exterior door. He extracted her promise not to damage the system and then gave her a key. After she flipped a DIP switch on the control board, Bluetooth was on, and suddenly we ruled the system. We didn't tell Ray about her doing that so it took Ray's service guys a few weeks to figure out how to put a stop to that access; when they did, we switched tactics again.

During the weeks while we had Bluetooth access, Sally had used the circuit diagrams of the control system to organize a bypass for the over-temperature safety circuitry of the system controller. The safety circuit normally operates to prevent the heat from going over a preset value; the default was set to 80 degrees F. She decided that an off-the-shelf idea would be the best approach, so we ordered a small "smart" thermostat which she disassembled and integrated into a simple but small device which could be inserted into the over-temp circuit. The device was WiFi capable, like all "smart" thermostats, so we could control it using an app on a mobile, and the school's WiFi signal was strong even in the mechanical room. She used her key to get into the room and it only took a half hour to install the device; it only needed six connections; and she tucked it into an inconspicuous space in the cabinet.

We set her little device to turn the heaters off when the building air temperature reached 62 degrees, over-riding the original over-temp control. To avoid detection of the bypass device, Sally had included a photocell in it to disable its operation when the controller cabinet door was open—the photocell detected the light. This meant that when the repair people were troubleshooting, they needed light in the room. The light shut her device off; the original over-temp circuit became active, making her bypass undetectable, and the heating ran just fine. When the lights were turned off, the device activated again and began regulating the heat. They never did figure that one out. That device worked really well. Too bad we can't patent it.

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Just before Thanksgiving—a unique American holiday, I guess—except that turkeys must hate it, I was summoned by the uni's dean of the Natural Science and Mathematics college. He wanted to give me some good news. I was chuffed—amazed and delighted, actually, when he told me that the Physics Department and college had created a committee to supervise my doctoral degree candidacy and had accepted my initial work and the first presentation I had made to the faculty as the prospectus for my dissertation. Apparently this research was a completely new idea in physics—true, it was a derivative of prior work but took it in a new direction, and this is precisely what PhD research is supposed to accomplish. What a far cry—and what a contrast—there was between my uni work and the rubbish I was facing in high school!

## Chapter 4

Even though the school remained too chilly for anyone's nudity, Norris continued to call a group of new Program selectee names every Monday. And before each weekend began, we messed with the school heat so that on the Monday, we froze 'em out. Each week, not one of those kids would break ranks with our united front and agree to participate. Even Joyce had gotten called for the Program the week before the Thanksgiving holiday. She proudly told her mum and me how she refused to cooperate.

"They called my name during home room," she told us. "Me and this guy named Ricky. The teacher told us to go and Ricky laughed, 'I wanted to say this forever—it'll be a cold day in hell before I do the Program,' and everyone laughed. Then he said, '...and even though it's *colder* than hell in here now, this ain't hell, so I'm staying right here and freeze in place.'

"We all really laughed. He's a funny guy. Anyway, the teacher looked at me and I just said, 'Ricky said it all. I can't add anything to that, except he might be wrong about this not being hell. We actually do have devils here—named Norris and Hayword.' Well, the class really erupted at that and the teacher had to spend the rest of the time calming everyone down. Everyone wanted to high-five me and Ricky," she giggled. "Word of what we said spread in the school too and I got lots of compliments from kids. That was wicked."

I had been hearing from a number of kids that Norris and Hayword were calling to his office, more than once, every kid who had previously been selected for the Program, to try to get them to participate. Joyce had been called by them too, in early December, she told me.

"I was nervous about going but it wasn't a Monday. Other kids had been called and they said it was to try to convince them to do the Program," she said.

"What happened?" I asked.

"Not much. Norris told me that if I cooperated, if I changed my mind and did the Program, I would get an 'A' in gym and health ed. I told them I wasn't interested; I already got 'A's in those classes. When they asked about why I refused, I told them about my medical condition and how it was criminal how they ignored that for an exemption. I told them that the feeling in my feet was just like frostbite was said to be like and asked them if they could imagine how much it hurt to try to stand when my feet got like that. I can't even walk then. Also, I told them that the Program is just wrong. I totally refuse to do sex stuff with random kids and I told them that was all I'd say, because I wasn't gonna discuss this any more."

"What did they say?"

"You know, that dumb stuff about not graduating and all. You told us about how to get around that, Emma."

I heard from others that Norris and Hayword were having the same conversation with all the selected kids. Those kids were proud that they continued to refuse, but I'm quite certain that the school's temperature played a significant part in their decision. In addition to his continued threatening of students with having their diplomas withheld, Norris sent out several appeals to parents, asking them to make their children participate. Mrs F got one of those letters. We both laughed at it. Judging by the number of kids who wound up in the Program, those appeals failed too.

As well, Norris had contacted me several additional times, but when I learnt that he wanted to discuss my Program participation, I had told him that I respectfully declined to have any discussion about that. I can only assume that I was the prime target of Norris' and Hayword's campaign to either convince

me or force me to participate, because they viewed me as the leader and organizer of the resistance, and that if they could get me to participate, then the other kids would follow suit.

Through means which couldn't be traced back to me, I even bought several full-page spreads in the local newspapers that explained what seniors could do to get the proof of graduation that colleges or employers required, if the school refused to issue diplomas or transcripts. We heard that Hayward was livid over those ads.

Perhaps in desperation, Hayward even got the Office of Social Awareness to threaten to withhold federal school aid funds from the state, but doing that would take congressional action, so that particular threat was largely ignored at state level. For us kids, that news was met with a "so what?" attitude. I suspect that, by now, Mr Smith, and perhaps even Norris, couldn't care less. I think that they just wanted to get their school back to normal again.

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The video meeting with the British consul in Anchorage, Sir George Marshall, was interesting. It turned out that he actually knew my grandfather. He had met him when he—Sir George—had been in his mid-twenties and had just started out in the British Foreign Office, where he had gotten a plum job as a junior attaché in trade in the New York consulate. My grandfather had dealt with him in working out duties and tariffs for several of his companies and their work together brought Sir George to the attention of top people in the Foreign Office. Basically my granddad had set him on his career path. He was delighted to meet me and was sorrowed to learn about my family and about my missing uncle, and he vowed to do whatever was necessary to help me.

So, evil me, I asked him to help me snarl up the Program's federal bureaucracy by bombarding them with all kinds of distracting requests. We came up with a few ace ideas right then.

One: To help the British government understand the impact of the Program on any British child studying in the U.S.A., the Program office needed to provide the embassy with an accounting of each British or Commonwealth child's location by state and school; the status of the Program's operation in that state and school; a listing of any British national child who had been a participant, voluntary or not, in that school's Program; and if such cases existed, a statement of what U.K. authority permitted the child to participate. For each of these cases of prior participation, the U.K. government would request a response from the U.S. State Department as to why this participation was enforced.

We figured that request, as convoluted as it was, was worth some bureaucratic anguish as the appropriate officials tried to work out how to respond.

Two: The British government would request from the federal government, for each state having the Program operating in its schools, proof that that state's laws had incorporated the Program as part of that state's educational curriculum, if that state had a British national enrolled in a school in that state. If the state required Program participation as a formal part of its curriculum by law, then the British government would require that that particular state education department must make a formal request for the participation for each individual British national child selected before the child could participate, and delay any participation until approval is given. If no such curriculum law existed, the British government would require that the state education department provide a detailed justification to the British government, citing the points of existing law which would require a British child on a sponsor F, H, K, L, and M dependent's visa to participate in their schools' Programs before any participation request can be made.

"Hah. That's enough gobbledygook to make heads spin," he chuckled. "Our embassy will reply to the Program office that the questions in my request would need to be addressed to our embassy's

satisfaction before your case is considered, Emma. We'll also put a hold on having any British national selected, even if it's a voluntary participation, and we'll let your ... pardon, you're a Brit too... the State Department know of this ruling."

"Excuse me if I'm being rude, Sir George," I said. "You're way too senior to be the head of a pretty remote consulate—Alaska, hello? And you're a knight too, so you've done some important stuff."

"Ha-ha-ha, Emma, Emma..." he roared. "I had heard a bit about you; we did some background checking, don't you know. Top marks for your perceptiveness. It's true; I'm not the consul here. I'm the U.K. ambassador to the U.S., actually. News of your insightfulness has preceded you. What... erm... the kids say... twigged you about me?"

I gasped at that news. The blinkin' ambassador? Crikey. "Actually, sir, it's what I said I noticed, but also how you referred to the embassy and what they would do and how they would contact the State Department. I didn't think that a local consul would swing that much authority to say what the embassy would do."

"Well, bully for you, my dear, very perceptive. How I got involved with you now is because the consul here in Anchorage had to return to London a few days ago for a family emergency. I'm scheduled to be in LA tomorrow and was traveling there from an economic meeting in Tokyo which just ended, and since Anchorage is right along the flight route, I decided to alter my schedule a bit and step in for our consul at your meeting instead of delaying it; I was also curious to see if Malcolm was truly your grandad and meet you if he was."

"Oh, I'm sorry if I overstepped my manners, sir. The problems I'm seeing with the school trying to enforce Program participation here have shaken me up a bit."

"No doubt, no doubt. And your manners are just fine, aren't they. Now then. I wonder if you would be open to visiting me and my son's family back in the D.C. area. My son is one of our mission's military attachés and his family lives in Maryland, not far from the embassy. We've heard that the Program is coming to Maryland schools soon, so this Program business of yours is much more than just of academic interest to me now. My grandchildren will, I'm sure, get caught up in all of that rot when it starts and I'd very much like to have you share your thoughts about how you've been able to stall it with your school and its officials. As well, I know that my granddaughters would just adore you; they are 11 and 13 now."

Sir George made me promise to try to come to Washington to visit him and his family when the weather got better and I told him that I'd do my best to make it happen. I really liked him. Good sense of humor, humble and self-deprecating. No stuffed shirt here. It would be wonderful to have a connection to my family again, even so indirectly.

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Monday, mid-December. Third period. I'm still in school; still no talk about my being expelled. Well, not this week, anyway. Although the Program ranks very high on the stupidity scale, you have to give them high marks for persistence. It's mid-December and the holiday break is just upon us. But they're still picking names and announcing them. A thought. What if everyone selected throughout the year, on the last week of school, they decided to do their week then? Hmm. That's over 400 naked bodies all milling around here. Second thought. Eeewww. That's a really bad idea.

Bloody hell, now what? I was wool-gathering again and the teacher is calling on me.

"Yes, Mr Johns? I'm sorry, I wasn't really listening."

Giggles from my classmates. They know how I tend to zone out at times, when my mind seizes on an

interesting idea and starts doing things with it. I read that Einstein did this and called it his “thought experiments.” That term describes exactly what I do, but I don’t think he invented the term. Another German? Wait... he was Swiss... no, German but became Swiss... Damn. There I go *again*. Miss Williams wants me to go to her office and the note the messenger brought says it’s about college admissions testing. Well, I haven’t had any contact with her since that attempted stripping debacle, so maybe it’s safe to see what she wants.

“Hello, Emma,” she greeted me.

Good, she looks relaxed, not angry. I looked at her hands, shoulders, and seat posture. All relaxed. It’s good, so far.

“Hi!” I chirped. “College testing?”

“Right. I’m letting the juniors know that the next group of tests will be coming up in February. You’ll need to select your tests and register for them by January 10.”

I nodded. “Okay, but...”

“One second, there’s more. Since you haven’t participated in the Program, I’m required to tell you that you won’t be permitted to graduate. But you have a chance to make that up; however, the rules are that you participate for the week you missed and then do a second week as the penalty. Now...”

I held up my hand. “Miss Williams. You said this was about college testing. Then you bring up the Program. I don’t like being lied to, ma’am.”

She started again, but I stopped her.

“No. *You* be quiet now and hear what I’m saying. If you interrupt, I’ll walk right out. First, I don’t need college testing. I don’t even need high school graduation. I’m in a doctoral program in physics at UAF and was told that I will receive my bachelor’s and PhD degrees together, probably in about a year and a half, if I stay on the schedule they gave me. I’m supposed to be teaching an undergrad physics course there this spring too, as a teaching assistant. Do you see why I don’t need testing or a high school diploma? You can talk now, ma’am.”

“Impossible. I don’t believe you; you must be having delusions.”

“I really don’t care if you believe me or not, Miss Williams. Now, is that all?”

“Not really. There’s a little more. Mr Hayword thinks that he’s gotten the British embassy to agree to compel you to participate in the Program. He found out...”

“Wait. I gotta hear this, but first, I need you to look straight into my eyes when you talk to me, not at your computer monitor. He was told that the embassy would require me to participate? Say that in your own words but look straight at me.”

“Just what do you think you are doing, miss?” she objected, but looked at me. “Yes, as I said, they will require you to do the Program.”

“Sorry, Miss Williams, but that was a total lie. Not only was Hayword not told that, he hasn’t even heard back from the embassy yet. The school will get an official post from them in about a month and it will only say that they are still investigating. How can I tell you’re lying? First, your eyes gave you away. Second, I know the ambassador personally and we’ve been in touch. I had an email from him this past Friday, in fact.”

“My god, she’s not like any teen kid,” Williams whispered, barely audibly. “She’s like a machine; doesn’t even act human...”

I looked at her in disgust. “If that’s what you think of me, then I have no need for you from now on. Please don’t ask to see me again; if you persist, I’ll need to get my attorney involved. Understand?”

I walked out, shaking my head. Well, that was a bust. How she went from relaxed and polite to a nasty bitch in three minutes flat is just frikkin’ amazing.

But apparently the mind games weren’t over yet, since on the Tuesday morning, I got a request to go to Principal Norris’ office. Well, he knew I wouldn’t meet with him about my Program resistance. I wondered if this was about yesterday’s encounter with Williams. I had the messenger wait whilst I composed a note back.

“Sorry, I’m not going yet,” I told them as the class gasped. “I’m sending a note back. He can read it and respond, okay?”

I wrote quickly,

You know I will *not* meet to discuss Program issues nor any interactions with your staff members concerning the Program. Please let me know the meeting’s topic and give me your assurance that you will stay on that topic. –Emma Clarke

I folded it up and found a roll of sellotape in my backpack and sealed the note with a piece. I didn’t want prying eyes to read it. Anyway, the response was quick; less than 15 minutes later, Norris sent a note back that he wanted to discuss the tutoring operation which I ran in that otherwise unused classroom. I asked for the messenger to wait again and wrote a second note.

I’ll meet with you to discuss my tutoring. Please limit the discussion to that subject. These are my additional conditions:

Mr Smith is to be present.

An office secretary is to be present.

No other person will attend. –Emma Clarke

I folded and taped my note securely to be returned. Later in the day I got the message that Norris had arranged to meet with me during the first period tomorrow.

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I went into Norris’ office with the secretary following me, and before I was sat down in the chair that was clearly meant for me, I faced Norris.

“Okay, sir, here I am. I need to repeat what I wrote when I agreed to meet with you. The agenda is my tutoring and our discussion will keep to that topic. I asked...”

“Hold on, young lady,” Norris interrupted. “This is *my* meeting. *I* will set the rules here, miss.”

I shot him a look, trying to mimic his fierce stare. Hmm. Not much reaction. I guess my “stare” needs more work.

Anyway, “Sir. *You* will listen to *me*. If you intend to make this into an interrogation session instead of the meeting I agreed to, I’m not staying. I agreed to have a meeting. Not to appear for questioning or to receive a lecture. Let me finish now or I’m gone.”

He raised his hand, palm up, toward me. Fine. Being a bit passive-aggressive; giving in but not verbalizing his surrender—I can deal with that.

I continued, “I was saying, I asked that Mr Smith come ‘cause he has some knowledge of my tutoring

and he even got us a room to use. I assume he knows how successful and popular that project has been?" I looked at Mr Smith.

Mr Smith nodded yes.

"And I wanted Mrs Begay here for female support since I can't trust Miss Williams. Williams insulted me to my face."

Norris scowled at that but I raised a warning finger. "...And Mrs Begay can take notes too, okay, ma'am?"

She smiled at me. "Yes, Emma."

I sat down and when Norris started to open his mouth to say something, I jumped right in again.

"Okay, our agenda is tutoring. I'll give you an overview of where the tutoring project is right now, 'cause I want to lay the groundwork for how it continues after I'm gone from the school..."

Whilst I was talking, I noticed that Smith was trying hard to keep from chuckling and Norris was fuming.

"... so I've begun to teach my methods to several sophomores and freshmen who are good students and want to help."

Norris finally found his voice. "Stop, stop. This isn't what I wanted to discuss. You just can't take over, Miss Clarke, like you're the one running the school."

"I'm not going to stoop to being snide, sir, but tell me that you're doing a good job at it yourself," I said innocently, plucking at my heavy sweater.

The other two burst out in short laughs. Norris gave them a nasty look.

I jumped into the momentary silence. "So tell me how my talking about my plans for the future of the tutoring project is off-topic, please."

Smith spoke up. "Wait, wait, everyone. Let's not have this wind up like the last time. This is an important discussion, so let's not lose sight of the real benefits the tutoring has been for everyone in the school, the teachers too."

I shot him a grateful look.

"Miss Clarke, how did you know which students would benefit from tutoring?" he asked. "I'm sure you didn't have access to their grades and you couldn't have known them either... you had only recently arrived in town."

"That's a perceptive question, sir, and it's actually part of my training the new tutors. Being new here, I was especially in tune with how the kids behaved, how they interacted with each other, and what kinds of groups had formed and their dynamics. In my classes, I watched expressions on faces when papers were returned. That told me who might be in trouble. In the café, I watched to identify the loner kids and those whose posture or other signs told me that they might be depressed. I spent my first four weeks, roughly, doing that, and decided that I wanted to help them if possible.

"The rest was just social interaction—approaching a kid in a friendly way and simply getting to know them. I never brought up schoolwork, but I did encourage them to talk about things that bothered them. Then I asked if they would like to meet with some other kids to talk about school issues, but we'd meet privately so that no one outside the group would have something to bully or tease them about. I wanted to separate this completely from the high school social scene, which you know is terribly hard to

do—everything that happens here is fodder for the social mill.”

He laughed. “That’s certainly true.”

“So in talking with kids, I learn their strengths and weaknesses. Some kids benefit from learning how to study. That’s basically time management. I show them how time could be handled just like money and is just as valuable. I talk about ‘spending time’ and doing it carefully like spending money. If you have a budget for money, you should try to make one for time. If you want something valuable, you save for it. Passing a test has value, so you save up time for studying for it. They’re all quite familiar with handling money. I show them how to make those ideas work for time. That’s the kind of coaching I do.

“The tutoring part is a little different. Some kids may have trouble understanding concepts, so I show them how many concepts can be linked into related groups to help in recall or understanding. That works well for social studies and language art classes. I start with something they know well and lead them to the areas that they find difficult, showing how to build their understanding on the things they already know. In maths and science, sometimes the concepts can really be challenging. But a lot of the problems come from pre-conceived notions that ‘that stuff is too hard to understand.’ So I try to find ways to show simple ways to think about those concepts. Like in maths. The numbers are like building blocks and the mathematical operators and functions are like the glue or bolts that put them together. I show how doing stuff like that can be fun, not scary or hard.

“A lot of things that we learn in high school needs simple memorizing. That’s hard for lots of kids to pick up. So I show them memory tricks, like that linking-facts idea again. And many of the teachers have the idea that if they teach a class so the kids can pass their tests, then they’re teaching successfully. That’s such a wrong idea, innit. What I do is to show the general concept which underlies a type of problem and how to work with that concept. Then you can solve any problem which uses that concept. Sometimes kids will need peer support too, not just tutoring help, so I also try to match kids with others who can act as a helper and support person, kind of like study partners. So that’s what I do, and it’s what I’m teaching the new tutors.”

They were hanging on every word. When I was done, the three sighed and leaned back.

Smith shook his head. “Miss Clarke, I don’t know what to say. Everything you mentioned... all of that is a teacher’s—and administrator’s—dream, to be able to do that. And you’ve had no formal training too. That’s something we need to build on—the foundation you’ve created. That’s what I think Mr Norris wanted to talk to you about. Where we go from here.”

I looked at Norris; he was looking very uncomfortable now. Something was up. I think that my explanation shook him and he wasn’t expecting anything like that. Okay, trouble’s coming. He looked back at me.

“Um, okay, Miss Clarke. That was... impressive. You’ve done well. And you’ve become more than a simple role model for many students here. So that puts me in a real bind. We’d very much like to have you continue what you’re doing, and what you’re preparing for the future, but as our most visible student role model, there’s one part of your student performance that can’t be overlooked...”

“You said this would be about tutoring,” I accused, “not the bloody Program. That’s where you’re going, aren’t you.”

“This *is* about tutoring, Emma. It’s about how we can allow you to lead such an important part of the improvement in the school’s overall academic performance. We have student standards to be met and you haven’t met the ones we set for you. So unless you agree to participate in the Program and set a good example for everyone, we’ll need to terminate the tutoring project.”

Smith looked dumbstruck. This was news to him. Mrs Begay looked like she wanted to murder Norris. I sat back with a half grin on my face; I had been able see where Norris was going when he had started his little speech.

“Mr Norris,” Smith started, “this isn’t a wise thing to...”

“No, Mr Smith,” he interrupted. “We really need to hold the line about making examples of students who don’t meet proper standards.”

I said, “I saw this coming, actually, and I’m not surprised. Mr Norris, I hope you have an idea where your next job will be because when the word gets out that you’re canceling the tutoring, I expect that things will get ugly for you.” I got up to leave. “Okay, I’m done here. So is the Program. It’s just about done here too.”

As I was closing the door, I heard Smith say, “She’s right. If you stop her tutoring, you’ll have a whole bunch of parents calling for your head. You just might lose your job over this. Was this worth...”

Shit. This is *not* good. I hope some of the kids in my army don’t get violent over this—some of them are so full of rage. I’ve managed to turn that anger into energy for their schoolwork, but if I’m forced to stop my sessions... Damn, don’t want to even think about that. At least we’ve got a little time to plan to defuse any reaction. We have three weeks of holiday coming and the tutoring sessions end today. I think we can get away with us meeting today since I wasn’t formally ordered to stop. I’ll tell today’s group that after holidays, we’re probably gonna have to change the format of the tutoring sessions.

I should have known. The rumor mill is alive and well. When I got to the tutoring hall (our informal name for that unused classroom) a few periods later, everyone there wanted to know if it was true that the operation was being closed down.

“Ahhh...” I sighed, then told the group, “Well, I wasn’t formally told to stop, so maybe not. We’ll see. But, you blokes, don’t get carried away with objecting to what they do. If we do get closed down, let’s organize some other plans to meet. Okay? I don’t see how the school can keep us from getting together on our own.”

Well, the rest of the period was lost. Everyone was talking about how to keep the tutoring going after we returned from holiday.

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Holiday break finally arrived. This would be uninterrupted time for me to spend in the physics lab and really get some useful work done. During the last month, I had discovered that all my efforts in trying to get the system using the carbon nanotubes to work had been fruitless. We did have a hint of superconductivity occurring, but only at temps of below about negative 70 degrees C. It meant we were on the right track because it did look like my recipe was working—so there must be some form of interference happening here. When I used the measurements of electron flow we had achieved to do some calculations, I found the likely source of interference. It appeared to be coming from the carbon atoms in the nanotube channels, kind of analogous to the way the damper rods in nuclear reactors throttle the fission process by absorbing neutrons.

I should have realized carbon could be a problem. The atom likes to play sleight-of-hand with its valence electrons; that’s why it’s so versatile in forming organic chemicals. It also loves to form lattice structures (think diamonds) and my calcs showed that the surface carbons tried to latch onto the substrate’s lattice structure, interfering with the lattice shifts which allowed the Cooper electrons to do their magic.

But after further thinking about the problem and consulting some references on the physical properties

of various alternate materials, I spotted a possible use of silicon, the leading substrate in electronics. Additionally, both carbon and silicon are in group IVa of the periodic table; they are tetravalent atoms which form primarily covalent compounds—that is, non-ionic ones. I did a literature search which turned up the fact that it was possible to form silicon channels, sort of like what I had tried to do with carbon, but instead of forming enclosed tubular channels, these channels would be etched into the substrate and then covered, like making a sandwich. I found a paper which discussed how a silicon nitride wafer could be made containing micropillar channel arrays using a complementary metal oxide semiconductor (that’s “CMOS” for you non-electronics nerds) process. (Never heard of “CMOS”? Sorry. My bad. So just ignore it; it won’t matter.)

This was getting way beyond my knowledge base, so I organized Sally into helping. She was delighted that she could be involved in my superconductivity idea and laughed when I called her my “Double-E nerd.” She was actually familiar with CMOS technology and apparently the Engineering Department had some equipment which could be used for fabricating a substrate wafer that could be used for testing my special superconducting recipe.

And then by mid-January, we were able to demonstrate that we had achieved superconductivity using one of the wafers that Sally had fabricated. It was small, but it worked, and continued to work all the way up to 35 degrees C! And at normal pressures too. We even observed the loss of the magnetic flux field in the substrate, suggesting that we had truly demonstrated superconductivity. Our group’s celebration was epic. And right around that time, my paper in *Nature Materials* came out. It attracted a fair amount of interest; the comments were positive but many recommended taking a “Let’s wait and see if this is real” cautionary approach.

Now that we had demonstrated the feasibility of the substrate material’s performance and its fabrication process, the rest of the development of an actual superconducting circuit was essentially an engineering problem and that would take far more resources than our small, remote university had access to. But the academic benefits to our group were immense: Sally got to be the primary author on an electrical engineering paper; the solid-state physics profs, together with Roberta, had made some important contributions and they got a paper out of their work too; and I could write up my own work on the physical properties of the conductor that was made of the doped substrate I had discovered ... well actually, invented, back last year, and subsequently refined into a working recipe.

The uni’s legal person—an outside attorney, since UAF were too small for an in-house legal department—recommended that the uni use a high-powered law firm in Seattle to handle the resulting patent work. There were a number of potential patents which could come from our work. Since patents are awarded to individuals and not organizations (unless a different arrangement is made prior to the invention), the legal people suggested that each person involved with this work get legal representation to protect our rights. That gives lawyers employment too, I mused.

I also learnt that our articles would receive expedited reviews and would be put on a fast track for publication. What a whirlwind this holiday break has been! But for me, the excitement is over. Back to my high school problems. I can’t wait for the year to end. But then I have my senior year after that. Do I really need to stay in high school? What for? Yes, I enjoy the tutoring, but I can do tutoring in uni too and the kids there are... well, usually... more motivated. Testing out—that’s something to look into.

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When I got to school the first day back, I learnt that the high school tutoring project had in fact been canceled as soon as I walked through the school’s front door.

“Emma! Emma!” a few of the kids in the group called to me. “Did you see? Did you see?”

“See what?” I wondered. I had been wool-gathering again. It’s how I occupy myself on the way to school.

“The door is locked and there’s a note on it saying that tutoring sessions are over!”

Norris. What a plonker. Didn’t have the bollocks to let me know in person.

“Okay, no fuss. Spread the word that we’ll meet... in... the media room. Hardly anyone uses it. And that we won’t call it tutoring anymore—let’s call it... erm...ah. ‘Emotional support focus group.’ ESFOG. I like that. But we’ll keep doing the same things. Okay, let’s meet in the media room, usual time.”

The principal is a nutter. Definitely. During home room, over the tannoy, after reciting the list of this week’s Program participant names (ignored by all), he announced that he had terminated the tutoring program because of the “inappropriate behavior” of its organizer in publicly opposing students’ participating in the Program. Talk about three quick strikes. Terminating what was regarded as a popular, pro-student support group, accusing me of inappropriate behavior, and portraying me as the sole instigator against the universally reviled Program. He had just batted a strikeout. (Cripes. I must be acclimatizing to the U.S. I just committed a baseball metaphor, of all things. Jeez.)

All over the room, kids began booing and hooting. I heard noise coming from outside the room too. Then when the class bell rang, the room emptied quickly and the hall filled with yelling students. My home room isn’t far from the office and the hall in front of it was so full that I hesitated going out into the melee. A whole bunch of kids had crowded into the hall there and they were yelling slogans like “Save the tutors!” and “Dump Norris!” and “We’re for Emma!”

Oh my. I had hoped that I wouldn’t get drawn into this. Meanwhile, another chant began to start up: “Strike! Student strike! No class! Strike!” Soon the whole area was shaking with the chant. When the class bell rang, no one moved to go to their next class.

I wriggled my way through all the bigger bodies in the hall (I know, I know, everyone is bigger) to get out of the area and went to the next building section, only to find that the strikers were in full voice here too. Where would they go next? I visualized a long line of kids circling the school with strike signs. Nope, that probably won’t happen, it’s cold, snowing hard, and snow is predicted for much of the week. Maybe an indoor parade. So the day became a bust. Despite teachers’ pleas—Norris was nowhere to be found—the kids kept up their boycott of classes all day.

Tuesday too. Kids came to school but stayed in the halls chanting. I don’t think anyone went into a classroom. And apparently a bunch of parents got involved too; there were a lot of angry parent calls to the district office demanding that either Norris change his decision or that the parents would organize a school board recall election, vote in a new board, and fire Norris. The parents who called said that they were supporting the students’ boycott, too. The board called an emergency meeting in part to figure out what to do but mostly to assuage the parents and I heard that so many parents came that they had to limit the number in the room. After hearing from a few dozen irate parents, the president closed the meeting for an “executive session.” It seems that they can do this when discussing personnel matters.

We found out the next day that Norris had been given a “vacation”—a leave until the end of the school year—a cooling-off period, I assume. For some reason unclear to me, Smith didn’t get to take over; a retired elementary school principal was recalled and appointed as acting principal and was told to keep things calm and keep the status quo.

The tutoring project was restored, but the new bloke’s, that is, acting principal Jenkins’, idea of a “status quo” was to try to restart the Program. It seems that Hayward (he was still around, I wonder

what he did all day with no Program to run) had convinced Jenkins that Norris hadn't been firm enough in insisting that the kids who got selected would be made to get stripped starkers. And since the school's heat appeared to be finally working, Hayward told him that inside nudity wouldn't be a problem any longer. Yeah, we had turned off our temperature controller device before the holidays. It was still installed, though, and we could turn it on again if we really needed it.

My pet secretary—yes, it was Mrs Begay—she was so grateful for the excellent gossip that I helped her collect that she had become a valuable mole in the office—told me that she overheard Jenkins telling Hayward to do whatever was needed to get the Program going. I wondered what would happen now, given such a blank check.

The following Monday morning, there was a new voice on the school's tannoy, Hayward's. He announced the sixteen names for this week's selected participants but then he followed it with the names of the kids in the very first group chosen—the one that included me. The students in the second group, he stated, would be required to serve two weeks in the Program this time, not one, as punishment for not participating. I'm sure that no one in the class paid any attention to him because the level of the chatter in the classroom didn't change one bit whilst Hayward was speaking. I looked at Adam; he caught my eye and looked down. (Ah... he must have noticed an interesting pattern in the cracks in the floor. I'm sure he had checked out all the dirt spots on the floor in the school by now, so he probably had switched to doing the cracks. I'm so nasty; the kid's just terminally shy.)

Anyway, Adam stayed, sat where he was, and neither of us responded when the teacher asked us to leave the classroom to go to that notorious stripping room. Oh, and what about using the gym for the stripping now, with the building a reasonable but still cool temps? I had heard that it couldn't really be heated to much above 60 F and the school had to wait for spring to reinstall the windows, which had miraculously reappeared, carefully cocooned in plywood and shrink wrap, on the school grounds sometime during the holidays.

Nobody showed up at the office to be stripped, based on demands we heard over the tannoy during the rest of the day. And no one interfered with our tutoring group; the new tutors were learning my methods and they were doing just fine. That was good; I was chuffed about their progress.

## Chapter 5

When I got home Monday afternoon after spending some productive time at the uni, Mrs F amazed me again with her incredible knowledge of so many people in Fairbanks.

“Emma,” she called to me when I came in the door.

“Yes, ma’am?”

I heard something this afternoon and I think it may be important—about that nasty Mr Hayword and what it appears he’s up to now.”

“Oh, blimey, what’s this now?”

“You know Rita from my bridge group?”

“Yep.” Mrs F was a bridge fanatic; played with her group every week without fail.

“Well, Rita’s cousin is the school district accountant, Roy Hodges, and his sister has a daughter in the school, a freshman, and you know her—she’s in your tutoring group. Sally Nevens.”

“Oh yes. Nice girl.”

“And that family is so grateful for what you’ve been doing at the school with her and everyone else. I suppose that’s why Mr Hodges broke confidence and passed some info on to Rita for me to warn you.”

“Damn. What’s that bloody berk Hayword up to, then?”

“Hayword came into the district office this morning asking about the status of his request to use some of the school’s Program grant funds to bring a number of Program officials to Fairbanks. It seemed that he planned to bring six people from Seattle and had arranged their flight and lodging for them starting this Wednesday. The board treasurer had cleared his request with the board lawyer last week. Roy said that he heard the treasurer say that all the flight and lodging arrangements had been made and that the Program people had their air travel confirmed and would be here Wednesday.”

“This sounds bad—I have a bad feeling about this...” I mused.

Mrs F went on. “Maybe this can help you a bit. Joe Whiston is in security at the airport and his brother has a son in the high school...”

“Yes! Larry Whiston is one of my lieutenants. His dad is in charge of security at the mall.”

“Well, perhaps Joe Whiston can find out who these mysterious Program people are,” she finished.

Yes indeed. It’s ace having such an effective intelligence branch in my little army, I chuckled to myself. I’ll ask Larry to see what he can learn about our expected visitors.

On the Wednesday afternoon after the tutoring session, Larry came rushing in with his news.

“Emma, they’re here. I’d been telling Uncle Joe about all the crap goin’ on at the school with us resisting the Program, so he was on board with us learning about who was coming in. He was watching for the daily Seattle flight and saw these six big guys get off. He said they were wearing official-looking badges, ones he’s never seen before. You told me that they were supposed to be Program officials but Unc said they looked more like private dicks, his words. Big guys who like to swagger around. Unc said he’d get the scoop on them; he’s coming to my house after supper to tell me.”

“Good job, Larry. Let me know what you find out. Ring me up later, okay?”

“Sure, Emma.”

That evening, Larry's call came. He was excited.

"Uncle Joe told me he got a look at their checked luggage. One bag had a tag that said something like 'U.S. Office of Social Awareness, NiS Enforcement Division, Seattle, WA.' So we Googled the office names on the luggage tag and found that there's actually a department called 'Naked in School Enforcement.' I didn't know there was such a thing as that. They were very protective of their luggage when it came out; then rented two cars and left. That's pretty much all we know now. Does that help?"

"Damn, I'm not sure. Let me think about this. Thanks and thank your uncle for me too." I rang off.

I didn't know there was such a thing, "Program Enforcement," either, but it made sense in an ominous kind of way. How do I find out more? Maybe Sir George. He'll know who to ring up. So I texted him the question. I got a response on Thursday.

*"Good afternoon, Emma. Well, it's still morning for you up there in the frozen north. The Program enforcers deal with problem pupils in the Program. They have wide latitude, apparently, but their authority is limited by state law so they only have civil authority. My sources told me they can be heavy-handed and use questionable tactics, though, so best be prepared if they're visiting, as you believe they are."*

Hmm. I better find better reinforcements than kids if they bring feds to the school. Cynthia's mum is a constable detective; I need to find out where Cynthia is now. So I went to the office. Yes, I actually do have the run of the school. With my varied hours here and at the uni, I'm always coming and going.

"Hi, Mrs Begay. You're looking quite chipper today," I joked. "Say, I need to reach Cynthia Master's mum—got a personal question. I'm not going to ask you for her mum's contact info, but could you give me the class Cynthia's in now and she'll tell me?"

"Let me look her up... okay, Room C117. I'll give you a note so she can leave the classroom with you."

"Thanks! You're ace."

I got Cynthia out of her class and we went to the media room; it was the closest empty room right now and we could be private there. Whilst we walked, I told her what I had learnt.

"I heard that we might have Program trouble on the way. Blokes just got here from a Program office in Seattle and they're supposed to be some kind of enforcers," I told her.

"Enforce how?" she asked.

"I don't know, but it sounds menacing. Let's assume that Hayward was given free rein to get the Program going here, and he decided to bring in some berks to intimidate us—or even use force on us, to try to get us to participate. I heard that these are big blokes and have official looking badges; that tells me that they feel self-important to needlessly display them."

"Oh, hell. What do we do?"

"Well, I think I've figured out Hayward's strategy, if you can call it that. He's so transparent. Back in early autumn when this dog's dinner all began and they were gonna forcibly strip me starkers, I got my solic... erm, lawyer to send a legal warning to the school that if they use force, it would be charged as a crime."

"Emma, you need to learn the right words," she chuckled. "And what's a dog's dinner? You use such weird expressions."

"Ha. It's Brit slang; my still using it is a bad habit. I'm trying to learn American slang but a lot doesn't

make sense to me. ‘Dog’s dinner’ means ‘a mess.’ Now *that* makes sense, not like a lot of Yank slang I hear,” I giggled.

“Yours makes worse sense, Emma,” she snickered. “And the legal warning—you probably mean an injunction. Touching someone with an intent to injure in any way is assault and battery, I know that from Mom.”

“Oh yeah, my lawyer said the crime would be sexual battery. So could you ring your mum and ask her what we can do? I’m guessing the showdown will come when they announce the next group of Program selectees on Monday morning. And oh, did you notice that there’s a crew in the gym covering the plywood area with tarps? I also saw a couple of very big heaters in there when I went past an hour ago. I’ll bet they plan to get the whole school in there again for the event.”

“Sure. I’ll call her now. Let’s see... Thursday morning ... she should be at her desk ... Hello, Mom?”

“...”

“Oh, no problem; I’m okay, but Emma needs to talk to you.”

“...”

“Yeah. It’s *that* Emma. Let me put you on speaker. Here.”

“Hi, Mrs Masters.”

“Hello, Emma. Thanks for taking Cynthia under your wing. She’s blossomed since she began working with you.”

“Thanks, ma’am. She’s a great person and’ll go far.”

“What can I help with... you’re not in any trouble?”

“Oh, no. At least *I’m* not. *Other* people might be. Let me explain.”

I told her what I had learnt, detailed my assumptions, and told her what I thought was being planned for Monday.

“Sounds to me like you figured it all out,” she said when I finished. “Yes, I know about that injunction—this is a small department, after all. Word gets out.”

“So what I didn’t mention,” I went on, “is that I know the British ambassador and he checked out what these enforcers do...”

“What? You move in high circles, young lady.”

“I guess. Anyway, he told me that the enforcers can be high-handed and, I gather, play fast and loose with the rules, maybe even with the law. Maybe it’s only by using intimidation, but maybe they even use physical force. So what I think is that even though Hayward obviously knows about the injunction, he’s making the assumption that these enforcers, since they’re federal, they’re immune from criminal charges. But I heard that they only have civil authority, not like constables.”

“Constables?”

“Erm... oh, police officers.”

“Ah. Well, you’re exactly right, dear. And even sworn law-enforcement officers can’t use force on someone unless there’s an urgent need. In general, any physical force has to be in the line of duty like when we’re responding to an apparent crime, and even then we have to follow a very precise set of rules.”

“Okay. But can you help?”

She laughed. “I’m sure help can be arranged. It’s slow right now. I’ll bet the guys in the department would be up for some fun at the expense of some federal enforcers, if they want to play foul with you kids. Hmm. How about if we have a couple of plain-clothes officers at the school Monday and ... he-he-he ... oh, they’ll love it ... have the swat team just outside? Oh god, they’ll have a ball if anything happens to get them involved. The most action they got recently was when a horny bull moose went on the rampage downtown last year.”

“Brilliant. Perfect. And oh, I just had a thought. My mind just keeps analyzing; I must have been thinking about what Hayward would want to do to throw more weight around and I just realized that *I’m* gonna be the prime target. Uh, I didn’t mean *his* weight; that just came out that way. He’s obese but I don’t like to criticize people for how they look. I know just how that feels. Anyway, Hayward thinks I humiliated him and probably figures that I was behind the initial resistance but really, it only took off after I got it started.”

“I heard all about how organized everybody in your Program resistance was. And off the record, we at the department have had a bit of a blind spot when certain things were happening outside your school. Just sayin’.” She chuckled.

Okay, that explains a lot. I wondered how some of those stunts got pulled off so smoothly. It helps when the police are on your side too.

She went on, “If you all will be in the gym, then we’ll have you covered. I think you’re right about it being done in there; it would provide a real show of force, which could explain their sending six of them. Two would work if it was just to intimidate a couple of reluctant kids. It looks like they intend to try to frighten the whole school. But if they do try to take you somewhere private instead of the gym, do this. Before Monday, pick maybe five-six friends who are in your classes and can watch out to see if you get taken away somewhere. I’ll give you a number for them to call if that happens, but I don’t expect it.”

“Sounds like a plan, then. Thanks so much for the help.”

“Thank *you*, dear. You have a few fans here in the department, not only me.”

“Bye and thanks.”

“Bye, Mom.” Cynthia disconnected and looked at me. “Wow. Goddamn wow.”

“Now watch your tongue, young lady,” I snarked.

“Okay, sailor-mouth. You have a great vocabulary yourself.”

“Guilty as charged,” I admitted. “Both Mum and Grandma were known for their salty language. I come by it legally.”

She laughed and headed back to her class. I had somewhere to go but now I can’t recall where. I’ve lost track of time. Okay, I’ll try the tutoring hall.

There were a few kids there. I saw three whom I could trust with the police phone number; I’ll find a few more later. Once I got that sorted, I tried to recall the names of the kids who had been in that first Program session. My guess was that Hayward would try to start with the sixteen of us, to make us a strong example of what happens if you resist. Yeah, that makes sense. I recalled the names of eleven of that group and, looking around, realized that amongst the kids here, they knew at least nine of them, probably more, and maybe between us we’d have them all. I gathered the group together.

“Okay, you blokes. You don’t wanna hear it, but there’s Program rubbish coming soon...”

“Thought that was over with!” someone moaned. Others just sighed.

“Nope. Sorry. School’s under new management, innit. So you *have* to keep this quiet. Okay?” There were nods. “On Monday, Hayward’s gonna try the same dog and pony show that he planned for us back in October, using an assembly in the gym; you know how that worked out for him.”

They laughed.

“So he’s gonna try doing it again, ‘cause he’s getting the gym ready as we speak. What you probably don’t remember is that during that assembly which didn’t happen, the first group of Program kids were supposed to be stripped starkers in front of everyone. Then Hayward announced our names, second week back from holiday; said we’d have to do two weeks starkers instead of one. Remember?”

They did.

“Well, I’m just about 99 percent certain that he’ll call the lot of us again at Monday’s assembly to have us stripped. So here’s what I want you blokes to do. I know that between all of us, I think we know most of those kids in that first group. So between us, how many do we actually know?”

They all began talking; comparing names of those kids they knew. Of course, of those kids they didn’t know, the ones in that first group would most likely know.

I went on. “Now then. Here’s the really secret part. Find them and talk to them in private and tell them about the Monday assembly thing. Say you heard, from a leaker in the office, that they were gonna be called to participate in the Program again. Tell them to go along with any normal orders they get, like going up to the front and stuff; they should do whatever they’re ordered to do, but reluctantly. Except if they’re ordered to remove any clothing at all. That, they must refuse. If someone just grabs them, they shouldn’t struggle very hard. They can resist, but not so much that they could hurt themselves. However, if anyone tries to pull any of their clothes off, then they should do what they can to resist and yell for help.

“But assure them it will *never* get that far. Help will be there instantly if anyone attempts to remove *any* article of clothing from *anyone* and they will have the best time of their life watching what will happen to the people who try it. Okay? This will *only* work if these instructions are kept totally secret, okay? Now go, find those kids, and tell them that they should tell *only* the others who were in that first group. Tell them not to spoil the fun for everyone. If any of them has a question about whether this is on the level, I’ll be happy to chat with them.”

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In the Friday morning announcements, there was no mention of any school-wide meeting that was scheduled for the Monday. Hayward obviously assumed that by keeping his assembly secret, it would mask his plans; he probably assumed that we’d somehow kill the heat in the gym again if we knew that there was to be an assembly. No, we had something more entertaining planned...

I guess the high school communication system had operated with its typical efficiency, because by mid-day Friday, it looked like every one of the kids in my first Program group had gotten the instructions and six of them had found me to get additional assurance about the festivities that I assumed would occur on Monday. Even Adam. He sidled up to me after home room (yes, his eyes were still on the floor, but there’ll be no more snarky comments from me about his doing that, okay?) and began telling me about Monday. I stopped him and thanked him, telling him that I had heard about it from someone else in the group. He shuffled away, greatly relieved at not having to talk to me any further, judging by his posture.

On the Saturday, Mrs... I should say Detective Masters stopped at my house. She had brought a small radio mike system—in crime novels, a “wire”—with her and showed me how to turn it on and where to wear it.

“This has a locating beacon too, Emma. We don’t think that they’d try to grab you, but this is our backup.”

Huh. I never thought of that. Guess that’s what police need to think about.

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The weather was a little better on Monday. It was a cold gray day, but the snow had stopped; the ice had been cleared from the roads, and all the busses arrived on time for the home room class period. When the announcements came on, the only message was that everyone was to go to the gym when the period bell rang and find somewhere to sit or stand.

When we got to the gym, all of the fold-up seating benches had been pulled out and mats had been placed on the floor, spread out randomly over the entire area of the double basketball courts, except for a big space in the middle of the gym. Okay, it’ll be crowded in here. My mental calculator looked around. A bit less than a thousand kids, in this area? I run on the track in here; it’s a 200 meter loop, the gym’s maybe about 80 by 40 meters. Looks like the open area is just under 50 meters long and 30 meters, a bit more, wide. That’s something like one and a half square meters (16 square feet) a person; a tight fit. I wonder what the fire laws say about this. When everyone got settled down, Hayward appeared but I didn’t see Jenkins anywhere. I guess he had turned the whole show over to the feds. Hayward began speaking using a handheld mike.

“I want to welcome everyone to our long-delayed assembly about our Naked in School Program,” he began, and the room erupted with booing, hooting, and jeering.

He got the noise settled and continued.

“I don’t think I have to review what the Program rules are, since all of you have gotten the pamphlet, seen the video we played for you, and heard the numerous announcements we’ve made in the past. Now we have some catching up to do since the Program is well behind schedule. So this week we’re starting up again and we will begin with the first group that was chosen last fall, but had refused to participate. I request that the students whose names I call now come to the center of the courts here.”

He read our names as the student body hushed, looking on with fascination, like a mouse stares at a snake ready to strike.

“All of you, now, come up here,” he finished.

I looked around as the named kids stood and looked around, saw each other, saw me, and then a few gestured an “okay, what now?” question.

I pointed at where Hayward was stood and began to slowly make my way there, threading between the kids on the mats on the way. As we walked up to the center of the gym, a quiet sigh sounded from the kids surrounding us. We lined up as far away from Hayward as we possibly could.

When we got there, Hayward regarded us with a barely concealed smirk and I noticed that a few gym teachers—plus six husky blokes—were stood in scattered locations around the room but were close enough to get up here quickly. There were also teachers stood at the doors, but I noticed some additional adults coming into the gym just then. The plainclothes reinforcements, I assumed. Hayward was speaking again.

“Last fall we couldn’t get the student body all together like this because the gym couldn’t be used,” he

began. “But we’re here now. These students standing here were to begin participating in the Program back then, but, in violation of the federal Program law, they refused to comply. The rules call for an additional week’s participation being imposed as a penalty for this group. Now we’ll begin by class, seniors and juniors will go first to remove their clothes; we’ll get the clothes boxes for them later. But we have one special case, a student who has overtly flouted the law and who has also illegally encouraged other students to not comply with the Program rules. The punishment for this student will be four weeks on the Program. Emma Clarke, come up here now, stand in front of me. You will be in the Program for four weeks. And I want the seniors and the other juniors to line up next to her.”

I looked at him and shook my head no. Taking my lead, no one else moved, either.

“If you don’t come here, we’ll help you,” he responded. “If you try to run, those men will Taser you,” and made a hand motion to where his reinforcements were stood.

The six blokes pulled pistol-like gadgets from their belts and kind of jiggled them in their hands, whilst all of the on looking kids in the gym gasped in surprise. Hayward pointed at us, one by one, directing an adult to each of us. Two teachers filled in for the remaining two of us who weren’t approached by an enforcer. The murmuring of the kids in the room began to grow.

One big berk grabbed me (they were all big) and said, “You come with me now, miss,” and despite my resistance (for show), he almost carried me forward.

Very soon, all of us were stood in front of Hayward, who looked at us, nodded, and said, “The girls will go first...”

The pig! I thought.

“...so start undressing right now, girls.”

I shouted very loudly, “It’s illegal to force anyone to strip off, it’s a felony, and I refuse to follow your illegal request. The other blokes here with me agree, right?”

Everyone stood there with me nodded and looked defiant.

Hayward pointed to us and then to one of the enforcer gits. “Strip them.”

Two of them rushed over, grabbed me, and began pulling at my clothes. I had a heavy pullover hoodie on over a sweater and I steadfastly kept my arms down, locking my hands together. The bloke pulling on my hoodie wasn’t getting anywhere. I could see the three other girls were being manhandled too but the clots were getting nowhere with them either, when suddenly a very loud voice, clearly amplified, rang out.

“Police! You men in the front! Release the children and raise your hands! NOW!”

“Not happening!” one enforcer called out. “We’re federal officers! Keep away!”

At that, about eight police, outfitted in black padded vests, all kinds of leather belts, helmets, and face shields, wielding truncheons, came roaring in. The two enforcer blokes holding me looked up at them, amazed, let go of me, and then the two of them, the berks, pulled out their Taser things and fired them at the oncoming police. I heard buzzing sounds coming from nearby too, so more of the Tasers had been fired as well. Of course, Taser darts have no effect on someone wearing body armor. I had the presence of mind to get out of the way as the swat team officers, swinging their clubs, waded into the enforcers and quickly subdued them.

Then I noticed Hayward looking around wildly and beginning to move toward an exit. He was looking behind him at the melee as he tried slipping away, so I darted around him and tripped him; he came

crashing down just as Detective Masters came running up.

“You didn’t need to do that, Emma,” she said. “He wasn’t getting out of here,” she said as she helped Hayword get back to his feet and then snapped handcuffs on his wrists whilst he objected loudly.

“Yeah, I assumed you’d stop him. But I needed to do that. Did you hear him? His lies? What laws did I break, Mr Hayword?”

“None, Emma. Calm down. You guys were perfect. Heh. I told you it was slow now. Well, not any more. Damn, all the paperwork we’ll need to do now. Stick around till we get a statement from you, okay, Emma?”

Then she turned to Hayword. “Mr John Hayword, you’re under arrest for assault, inciting sexual battery, and violating a court injunction regarding a prior attempt to engage in a similar felony. You have the right to remain silent...”

She went on, giving Hayword a canned speech which I learned was called a Miranda warning or something.

Well, I had promised everyone a show. The police put on a blindin’ good one; a swat team in action whilst a thousand enthralled kids looked on. Fortunately nobody panicked. Actually, everyone was so riveted to where they were sat or stood, watching the drama unfold, that they had forgotten their surroundings. When the action stopped, some level-headed teachers began to slowly herd the wide-eyed kids out of the gym and back to the classrooms.

I glanced around; it looked like all of the intended “victims” of today’s drama were still here and some were talking to a few suits and uniformed officers. Giving their statements, clearly. I glanced down—what’s this? A small folded-up pamphlet—yeah, that’s right where I dumped Hayword; this must have been his. I unfolded the thing. Blimey! “Naked in School Administrator’s Guide.” Ohmygod. Is this a treasure or what? I slipped it into a pocket when I noticed an officer coming over to me. He asked if I was okay and then asked me to tell him in my own words what had happened. That done, most of us “victim” kids were still there so I joined them and we did our own post-mortem. That consisted of a lot of high-fives and much congratulatory laughter. Soon a teacher appeared and shooed us out, telling us to go to class. The rest of that day was a total waste, as you can imagine.

The police had hauled away the six enforcer blokes, two teachers, and Hayword. Even though Jenkins wasn’t in the gym, they arrested him too. The fallout from this escapade was extensive. The local prosecutor’s charge sheets probably filled a book. Is that why they call it “booking” a person? Whatever, Emma, just stick to the facts. Jenkins got the lightest charge, he had been something like an accessory to the assaults by allowing it to happen in the school; the two teachers got simple assault (battery was dropped despite the fact that they had restrained two kids); but the feds got the whole book of charges. Hayword and the enforcers—damn, now that sounds like a rock group—tried to get immunity. The federal U.S. attorney in Seattle even flew in to try to persuade the local court to dismiss the charges; they were performing their official duties, he maintained. At the arraignment hearing, the U.S. attorney pointed out that one of the enforcers’ roles was to ensure that the selected participants strip when ordered.

The local prosecutor demanded that the U.S. attorney provide a reference to the legal principle which permitted the use of physical force to strip anyone naked, let alone a minor. He also asked whether forced stripping had occurred in any other jurisdictions and if so, to cite the details. The U.S. attorney couldn’t provide any. He only had documentation from several other schools where enforcers were present when some reluctant kids were stripped; however, he could not provide any evidence that the selectees involved had been coerced to do it or had clothing forcibly removed by an enforcer.

The U.S. attorney tried to explain that since it appeared that no overt force had been used in those prior cases, no criminal activity had occurred then. The local prosecutor demurred, saying that even using intimidation or threats to force someone to strip was a form of battery; also, that intimidation act certainly qualified as an assault, and there was nothing in federal law—or state law which took precedence—that permitted a child to be assaulted or battered, even if they had been selected for the Program. And if such a law could be adopted in any state, it would probably not pass judicial review.

The details of those legal things didn't interest me much. What did interest me was that Norris wound up taking early retirement, Jenkins was sent back into retirement on judicial probation, and Smith was elevated to principal. Oh, and Williams? She had been moved over to the middle school during the holidays. The school district people were unhappy with how she had manipulated the Program selection process and falsified my permission forms. I was surprised that they didn't sack her, though.

And some interesting information began to emerge, some of it coming from Hayward's pamphlet. The federal rollout of the Naked in School Program had begun with the Office of Social Awareness recruiting a number of pilot schools, generally ones located in smaller communities. They had offered grant funds to these small local districts to have them run the Program for a year or two so that any difficulties could be identified and fixed before the Program became universal. This explained why our school was the only high school in Fairbanks running the Program; our school board had accepted the federal carrot. The cash. Hayward's pamphlet also listed a few Program "enhancements" which schools could adopt to extend the Program: mandatory naked gym classes, naked cheerleaders, making lockers and loos unisex, and a few suggestions for units in hygiene and health classes. I looked over that rot. Disgusting.

With Hayward facing jail for his having directly ignored the injunction issued last October; the feds simply withdrew the requirement for running the Program at my school. It was only a pilot project, after all. Mr Jameson told me that he learnt from talking to the school district's lawyer that the feds were seriously considering not requiring Alaska schools to have the Program unless the schools could be kept warm enough and that major changes to the Program would need to be made to accommodate the environment.

"I got a lot of info from the Fairbanks district attorney, Al Hutchins, about the Program in Alaska," Mr Jameson told me soon after all the enforcers and Hayward had been arraigned. "There were three other Alaska schools running the Program too. There were two schools in the Anchorage area. One in Palmer and one near all the military bases. A third one in Juneau. Hutchins told me that they had some serious problems at those schools and the school officials, cops, and prosecutors were trying to keep the lid on word getting out; they were afraid that if kids in other places heard what happened, the violence could get worse."

"Really? What happened?"

"Hutchins said that in the two Anchorage area schools, when the cold temps prompted many of the kids to resist, it wasn't done peacefully like here. When they started the Program there right after the winter holidays and selected the first group, none of the kids cooperated, so they tried forcefully stripping a few and those kids fought back and afterwards, no one would cooperate. But something worse happened in the other school; they did the stripping in their auditorium and it basically turned into a riot; the kids just went crazy fighting with the teachers and a few of the kids and teachers were actually injured, several wound up in the hospital with serious injuries. Also, like here, none of the kids from military families would participate either."

"At least our resistance was peaceful," I agreed.

"You guys did well. The Juneau situation was far worse," Jameson went on. "Alaska is truly the last of

the country's 'wild west'; what happened was a case of vigilante justice. The Program was started there just a few weeks ago. The kids resisted there too but several kids were force-stripped. The result of that was ugly. That evening, one or more gangs of people, and from their size, most were likely adults, visited the federal program person's lodging and beat him to a pulp, breaking both his arms and several ribs, and leaving a warning that if any other federal Program person showed up, their bodies would be used for fish bait. And the school principal and the teachers who were involved in the kids' stripping were also beaten, nowhere as badly though, and all the windows in their cars were destroyed. The local police have no clues, other than it must have been done by people who have children or relatives in the school, but no one's talking."

"You saw how our local community supported us here," I told him. "Those other people's reaction was terrible, way too extreme, but their children were assaulted, were given a horrid fright, and humiliated, weren't they. Perhaps too, it was how unreasonable the feds were in their rules—you were at that meeting and saw Hayword's attitude about kids' health, for instance. So what did Prosecutor Hutchins think would happen now?"

"Yes, I saw how Hayword's attitude angered everyone at that meeting, even some of the school board members," Jameson answered. "What will happen now? I assume that Alaska schools will most likely not be required to have the Program in the future since many of its elements, like outreach and outside activities, are not feasible to require. And temps inside the schools can't be kept reasonably warm to allow nudity all day. We'll have to wait and see."

"Another thing we never considered, Mr Jameson. No one ever even considered what to do about starkers kids, whose clothes were locked up during the day, if an emergency building evacuation were needed."

"You're absolutely right."

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There was a squabble about the district retaining the federal grant money; the district had incurred significant costs—mostly having to do with heating the buildings and "repairing" the heating systems. And the missing gym windows had to be put back. The district had also paid for a lorry-load of Program curriculum-mandated instructional materials which could no longer be used. The school district administrators were grateful for one company's offer; as a "donation," the company would reinstall the gym windows for the cost of the needed materials only. I knew that particular company could put the windows back exactly as they had been.

Usually court cases, like this one, which became known as the "Frozen Program," could take a year or longer to come to trial. Rather than wait for a trial, the prosecutor decided to accept plea deals from the enforcers, so an arrangement was made. Instead of their facing a potential 20-year prison term for sexual battery on minors, firing Tasers at police officers, and resisting arrest, they were sentenced to serve one year in prison, five years of probation, and required to register as sex offenders. Which meant that they wouldn't be allowed any jobs requiring contact with children. So they couldn't be enforcers when they got out; that was ace. They were allowed to serve their prison time and probation in Washington State. But there was no deal for Hayword—for violating a court injunction together with the other felonies, he received a five-year sentence in a state prison. He could have gotten a twenty-year one for sexual assault on minors.

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Now it's March; spring is almost here, and Mr Smith is occupying the principal's chair. We get along; he's perceptive and I think I'd have a difficult time manipulating him—not that I'd want to, anyway;

he's a straight shooter. He called me to the office.

"Emma, I've been thinking about you."

Uh oh. Those aren't words one wants to hear from your principal.

"No, no. Not how you're thinking."

See? He can read me. I thought I had kept my face blank.

"Look," he said. "You're the smartest person in the school—I suspect in the entire state, actually."

I waved my hand dismissively. "I don't think so..."

"Anyway. You're totally wasting your time here, except for that stellar tutoring program you started. And the students you trained are doing a fine job too. I had an idea and want your input. Since we're just off the UAF campus, we could be a lab school for their Education Department. I don't know why we didn't consider doing that before. I'd like to get some of their students in here and learn the techniques you used with our kids. We can make this an ongoing program then, when you're gone. What do you think?"

"Brilliant, sir. I like it."

"Now about your status. I'm recommending to the school district that you be graduated this May. I can't see you wasting another year here when you can be fully in college. You're up for a PhD already, hell, and still in high school. According to your dean, you've almost completed all of your degree requirements—even for your PhD. We can't let you get your PhD before your high school graduation, can we?—that would look really bad for us," he joked. "Now my recommendation would carry far more weight if I had an ACT score to show along with my support. The next tests are in April and I can sign you up. Interested?"

I was, and got signed up. I do these standard tests pretty well. England uses them some.

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Okay, that's another step in my academic progress. I just did the ACT exam series. Wasn't too bad; it's a pretty rigorous series of tests. I wonder how it would stack up to the U.K.'s A-Level Exams. Probably about the same. Glad this is done with, I mused, as I left the testing room after a long day. That's when I suddenly realized—almost exactly a year ago, it was in mid-April, that's when I had finished my first Cooper-pair calculations. So was that day the birthday of room-temp superconductivity or an anniversary? Birthday, I suppose, since it hadn't existed before, at least in the form I had developed. So in two days it'll be the first anniversary, I guess, not its first birthday... Jeez... why do I get my knickers in a twist over trivia like this?

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So it's now May and my scores are back. I have to blush 'cause I got 36s. Even considering that the tests include social studies and biology, I still got a top score. Mr Smith told me that I will graduate with the seniors in two weeks. The office is still trying to figure out how to calculate my overall ... um ... GPA, they call it, and class standing. It seems with all of my testing out of classes, they have very few actual class grades to use to calculate a GPA. Another problem. They can't get a graduation gown in my size in the school colors. What a hoot. It's not that it isn't in the catalog—it is, but they so rarely had a request for one my size, it was out of stock and had been back ordered. Pinning up the hem on a larger one won't work 'cause it falls off my shoulders too. So I organized a gown on the internet in size 42 since I'm a bit taller than four-feet-eleven, and the color is similar to the school color. It comes with a cap and tassel.

Joyce is cheesed off that I'm graduating.

"You're only 13! And a sophomore! Or junior...? or... whatever... How can you graduate? They must have made a mistake!"

She was also concerned for me since I was graduating with the seniors but wouldn't be in the school's yearbook.

"Emma, you won't be able to autograph your picture for your friends! Doesn't that bother you?"

"Not really. I have no friends in the senior class, actually."

Yes, that made her sad for me. But something else really bothered her far, far more than my graduating early—she was shocked—shocked, she told me, that my gown didn't match everyone else's. You know, she's a fashion-conscious gal.

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Our physics papers came out. Suddenly I'm a national rock star—no, international. People got even more excited when they learnt that I'm only 13. Thirteen and a half, please! That half is important. So is the half inch it appears I grew, so now I'm finally a whole five feet tall! And I'm getting used to thinking in the English measuring system. It's funny; it's sometimes called the "English" (or "Imperial") system but the English've used metric for ages. Well, maybe for a bit more than 30 years... as I said, ages.

I didn't realize this, but when an important paper comes out, the author gets lots of invitations to come to universities and research centers and give a seminar or two. They pay for the travel and an "honorarium" too; the amount is based on your importance and demand for your time. Well, I guess I am *very* important and there was *lots* of demand. You know? The smallest honorarium offered was \$750! For an hour's talk. Well, there's a whole day spent talking to the faculty plus the travel involved too. But still...

Giving seminars sounded intriguing; I love to teach, after all. But could I, first, at 13, be permitted to travel and stay at hotels and such alone? And second, on an L-2 visa, could I accept an honorarium? The payment is actually a gift of sorts, but it's also funds given in exchange for services. It appears that as a minor, hotels would not allow me to reserve a room and possibly even to stay alone. On the visa question, contacting the U.S. State Department's Citizenship and Immigration Services office for the answer left them scratching heads. The question had never come up before. A 13-year old L-2 visa holder getting honoraria?

"Well, could it be paid to a trust instead?" I asked.

"Oh my god. Maybe you should look into changing your visa? That would probably be easier. We'll have to get back to you," was the response.

Well, I went and texted Sir George and gave him a one-sentence précis of the issue.

"*I'll ring you back. Is now good?*" was his text back.

"*Sure.*"

My mobile buzzed.

"Sir George?"

"Emma, how delightful," he chuckled. "You bring such light into my boring bureaucratic life here. And interesting puzzles too. I heard of your publication. Outstanding work, my dear. Which leads me

to a solution. We can get you an ‘O’ visa for sure, based on your groundbreaking discovery. I’ll set it up so that you won’t have to leave the U.S. and apply to return. There are many reasons to allow this waiver. So where are you thinking of giving seminars?”

“I haven’t decided yet. I have three, maybe four dozen invites and they’re still coming.”

“Fascinating. Any on the east coast? Maybe you could visit if there’s a close by school.”

“Let’s see. I sorted them by state. Maryland or Virginia, right?”

“Yes.”

“Oh, okay, Maryland. Baltimore. Oh my.”

“What?”

“A joint offer from Johns Hopkins and University of Maryland. They’re offering \$3,000 for a two-day site visit including two seminars—they’d be combined, with people from both coming.”

“Maryland’s close to my son’s house; Hopkins is less than an hour. Ha. Faster if you use a diplomatic car and police escort. You want to look into that?”

“Why not. I’ll get some experience giving a talk away from my home territory. Let’s see, they offer a number of times during the first two weeks of June. I guess that they have a lot of open times since regular classes won’t be in session.”

We settled on a few dates when Sir George would be available and then I contacted the uni. My first real seminar! Of course, I had given four formal seminars at UAF at this point, but they were to friendly faculty members. Mostly friendly. One of the four was my oral exam; hell, they tried every way from Sunday to trip me up. A second was my dissertation defense. That was much more civil—actually fun, ‘cause I could get to ask my committee members if they *really* understood some of my calculations. I had developed a new way of doing Fourier transforms. I could only imagine the reaction of some pompous self-important senior professor at one of these seminars when he realizes that the speaker is a short middle-school-aged kid! Maybe my marked Brit accent will charm them.

When the week before my departure came, I hadn’t heard anything about any new visa and still hadn’t gotten an answer about honorarium payments from the federal USCIS office, so I decided to wing it. Instead of providing my Social Security number (yes, I had to have one, even though I’m not allowed to work), I sent the bank transfer info for the charitable fund which my U.K. trust had used to pay my research grant at UAF, to the Johns Hopkins money people, telling them to call the payment a donation. I sent its U.S. tax ID number also, just in case.

A week later, my flight from Anchorage to Dulles International Airport was landing, after a 13 hour flight, including the layovers. I had gotten them to pay for business class tickets too. When I got out of the security area, I saw a very well-dressed bloke holding a sign which read “E. E. Clarke.” I went to the gent and tugged his sleeve; he looked down at me. Yes, looked down.

“I’m Emma Clarke.”

“Oh! Apologies, madam. I was not anticipating encountering...”

He had a nice British accent. RP—that’s the Brits’ “received pronunciation.” Very nice. I felt right at home.

“It’s okay. I’m used to that,” I giggled. “One day I’ll grow up... I hope.”

“But you’re famous... erm, well, I was expecting someone taller. I’m Anston Tieders.”

I gave him a big smile and pulled on his arm. “C’mon. Just one bag. It’s a vile turquoise-puce color, medium size. Can’t miss it.”

I handed him the claim check.

We got my bag and headed out to... wow, a stretch limo with diplomatic plates. And Anston wasn’t the driver either, since he got in the back with me and offered me refreshments from a fridge built into the limo.

“Okay, Miss...”

“Please, Emma.”

“Emma. I am a press attaché at the embassy. I must apologise once again for not meeting you at arrivals. Sir George did not give me much information, only mentioning that you are studying at a high school and taking university courses, so I had certain expectations...”

“No; it’s no problem. He’s only seen me sat at a table during our video conference and didn’t know that I’m ... well, somewhat shorter than the typical high school girl.”

“Thank you, madam. On a separate note. The press has been informed that you will be conducting those workshops here and have discovered that you are a British citizen, so they have reached out to my office.”

I chuckled.

“What? Have I said something amusing?” he wondered.

“No. The media wanted to interview me up in Fairbanks too but they were too lazy to fly up there so they were pestering the uni to do it by video. I put them off by saying I was too busy with graduation and preparing my talks. So they’ve caught up with me?”

“I expect so. Some of their interviewers rang our office and inquired about how to contact you. Your workshops are scheduled for the Wednesday and Thursday; you preferred to have tomorrow off to recover from your journey.”

“Yep.”

“You will be staying at the embassy residence. Would it be possible for you to spare an hour in the afternoon for a press conference? It could significantly enhance the public relations for Great Britain.”

“Sure, I can do that. Anything I should know?”

“These will not be the usual correspondents, such as political or social. They will likely be science or technology reporters, so I do not think you will have questions about boyfriends and the like,” he chuckled, “although there may be some society reporters since they will know you are a woman in a university doctoral program. So they will assume you to be 24 or 25 and will wonder how you got into physics.”

“Ah. Yes. This might actually be fun,” I said.

“You wouldn’t mind?”

“Bring ‘em on.”

## Chapter 6

Sir George greeted me when we arrived at the residence. It was really strange... even though this was the first time we had met in person, I felt that I had known him for years, I felt so comfortable with him. He felt to me... kind of... well, like a male version of my grandma, actually. So I mentioned that to him and he laughed.

“Amazing, Emma. Your granddad told me something like that too. It’s one of the reasons we got on so famously when we first met. I had hoped that you would get to meet my wife Isabella, but she’s back in London with our daughter. It’ll be her second baby.”

“Ooh. You’ll be a grandfather again. Exciting. You’re not there too?”

“Before the baby comes I’d be useless, Isabella says. I’ll go after the baby is born. Emma, are you tired now or do you have time to talk about a little business?”

“Actually I kipped out a bit on the flight so I’m okay,” I said, “but what kind of business do you mean?”

“All of yours. My contacts tell me that there’s a bidding war developing for the licensing rights to your inventions and I want to be sure that you’re protected and that there’ll be some protection for the Crown as well. I don’t think that, in your academic mind, you can conceive of the money and influence your inventions can bring.”

I blushed. “Really? My god, is there something that I need to do?”

“I’ve taken the liberty of contacting your solicitor—the trust’s executor. You do trust him?”

“Completely.”

“Yes, he has a fine reputation. He’ll be in touch with you soon and will want to create a group of investment experts and economists, plus a few experts in international law, to advise you. But there’s another step I’m going to advise that you take.”

“Oooo...kay? This is gettin’ pretty gnarly now.”

“Hold your breath for this, then. One big problem is that legally, you can’t make decisions on your own. At 14 years old...”

“I’m still 13. My birthday’s in August.”

“All right. You’re a minor and will be for four more years and those four years are critical for your scientific work, especially now that your uncle has been missing for about nine months. After a year he will probably be declared deceased and then, if you stay in the U.S., you’ll be put under the control of some state child protection agency and your guardianship could even be up for grabs, given how wealthy you are and how important your work is. In the U.K., much the same things would happen, I’m afraid. What we really need to do is get you emancipated.”

“I’ve heard about that. Someone in my high school. They become a legal adult.”

“Precisely. Usually it isn’t done for children who are under 16, but I think with your situation, a doctoral candidate...”

“Erm. Doctor now. Dissertation accepted and defense passed. Just need the ceremony and sheepskin. Having those just formalizes the fact.”

“Oh my, Emma! Congratulations! Okay. A PhD in physics, and an international reputation, a clearly stable housing situation, a source of independent support, and strong social ties. Everything a family

court judge looks for. And no one to challenge the petition. You'll be a legal adult—a small one, but legal still. Do you want to go ahead?"

"Absolutely. And don't take jabs at my being vertically challenged."

"Couldn't resist it. Will you be up for a family visit tomorrow? I'd like you to meet my son and his family. They can come for lunch. The press conference will be later. The girls are just gagging to meet you."

"Sure. Do I need to do anything on the emancipation?"

"I'll have something prepared by tomorrow. I'm thinking we can have it done by video, using a London judge I know, with local barrister services from your trust executor. He and I could be your sponsors."

"Thank you so much!" I pulled him up and hugged him. "I feel like you're family, sir. I miss that very much."

"I'm honored, dear. I've gotten to feel the same about you."

"Well, if this isn't being too forward, since you were a good friend of Grampa's, that almost makes you a great uncle. Can I call you 'Uncle George'?"

He got tears in his eyes, reached out, and pulled me into another hug.

"I couldn't deny you that, my dear, and it would give me great pleasure if you called me your uncle."

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Crikey, they really go all out for the meals here. I had arrived at the residence about 5:30 p.m. and my meeting with Uncle George (calling him that sounds so right to me) lasted about a half hour. He had some official business to do back at his embassy office so I was on my own for dinner. One person. They served a six-course meal. I was quite hungry, so I really tucked in. Hey, if I stay, maybe eating like that'll help me grow. Nope, won't make me tall, it'll make me fat. I need to make sure that I organize some exercise now that I'm out of high school. Even when the gym was freezing cold, I could use the indoor track and do a 5000 to 6500 meter run at least three times a week, trying to get my 1600 meter time consistently under six minutes for the longer runs. The teachers tried to get me to run for the track team but I absolutely refused because of the time commitment. I frequently used the uni pool for workouts too.

Breakfast Tuesday morning was a buffet and I got to meet a whole bunch of people who were on the residence staff. This is such a beautiful building on wonderful grounds. As well, it's very close to the U.S. vice president's residence. I can see the embassy itself across a small parking lot; it looks like a plain office building. But the residence—blimey, just like an English manor house. I remember seeing the British PM's house at 10 Downing Street when I was little (ugh, still am little) and it looked like just a common row house. What a difference.

Uncle George's son and family arrived at about 11 a.m. He's a good-looking, solid sort of bloke who was wearing a uniform with a crown, a diamond thingie, and the letters "RM" on the shoulders. Whilst he was greeting his dad, I whispered to a... butler, I guess, "What's his rank?"

"Lieutenant colonel, Royal Marines, miss," was the response.

Two girls ran in and hugged Uncle George, glancing shyly at me. Then Uncle George brought the three of them over to me.

"Dr Emma Clarke, let me introduce you to my son, Lt. Col. Stuart Marshall; his senior daughter,"

winking at her, “Miss Samantha Marshall, and last but not never, never least, her sister Miss Abigail Marshall.”

Abigail stuck her tongue out at her granddad, then the two girls nodded shyly at me but turned to Uncle George when he told them to wait to talk to me till after their dad had spoken to me and he began asking them about their day, grinning at their enthusiastic responses.

Whilst I was shaking the colonel’s hand, he spoke quietly to me.

“I heard I got an instant cousin I hadn’t heard of before,” he remarked as he chuckled, giving me a light hug. “Dad says that he’s your uncle now.”

I blushed. “Erm... yeah... I kind of adopted him, I guess.”

“Well, welcome to our family. The rest should be here in a few minutes.”

Then I turned to where the girls were talking with Uncle George and greeted Samantha (“Call me ‘Sam’!” she insisted) and Abigail (“I’m Abi! That’s A-B-I!”); they both looked into my eyes uncertainly so I winked at them and they both threw themselves into my arms and began jabbering rapidly.

“Gramps told us all about you!” one squealed.

“Yeah, you were a hero!” from the other.

“He said you stopped that blighted naked Program in its tracks!” This one was almost a duet.

“And you graduated college already!” Abi now.

“And you’re our age. How did you do that?” Sam.

“What’s Alaska like? Do you see polar bears?” Abi.

Col Marshall walked back over to us, laughing. “Girls, girls—give Emma a chance to answer! Let’s go to the sitting room and you can ask her, but one at a time and give her a chance.”

“They’re fine, Colonel,” I answered, putting my arms around their shoulders. “Just excited about meeting someone they had only heard about.”

“Emma, please call me Stuart. After all, we’re cousins,” he said, winking theatrically at the girls.

That set them off again, wanting to know how I could be their cousin. I explained, laughing, as I followed Stuart to the room. We sat, easily chatting, for about ten minutes. The girls were utterly charming. They clearly loved each other and I felt a pang about not having that kind of companionship as I was growing up. I explained about my academic background, how I had skipped several grades, and what “getting a PhD” was all about. They hung on my words. So did Uncle George and Stuart, interjecting a question now and then.

Then we heard noises coming from the foyer. The rest of the family had arrived, and Uncle George and Stuart rose to meet them. Uncle George motioned us to stay.

“It’s Mum and Andrew,” Abi said. “You’ll like our brother. He’s ace and he’s hunky too!”

Brother? Uncle George was holding out on me? Must be a little guy—younger brother.

They both giggled, embraced, and began sort of bouncing on the couch together as they held each other. They had each other to love. I was so envious. The voices in the hall grew nearer and I looked up. And my heart stopped. Seriously. I couldn’t breathe. The boy must be Andrew. He looked to be just about 170 centimeters... okay, okay, for the metrically challenged, that’s about 5 feet, 6 or 7

inches. Maybe 15 or 16 years old. He had wavy blonde hair over his ears, broad shoulders, and a trim waist. He wore a wide smile as he was speaking to Uncle George. His dad walked next to him, an arm resting lightly on his shoulder. Clearly this was a very affectionate family. Then Andrew glanced into the room and noticed me; our eyes locked. Something clicked inside me and I suddenly felt an unfamiliar wash of emotion; the feeling flooding through me was overwhelming, almost choking me. I quickly steeled myself and tamped those errant feelings down... mostly.

That's when I first noticed the woman who had come into the room with the others. She immediately came over to me as I was standing up.

"You must be Emma," she gushed, radiating excitement. Now I know where her daughters get it from. "I'm Gerry. Stuart's partner. We have to talk so that we get to know you, dear!"

She said "partner." As in taking an equal share in the family. I loved that.

Uncle George drew Andrew to him and when he came over to Gerry and me, took her hand.

"She's beaten me to it, but let me do the official honors, Emma. Dr Emma Clarke, it's my pleasure to introduce you to one of the dynamos of the fair sex, my daughter-in-law, Mrs Geraldine Marshall, but she'll insist on being called Gerry."

I took her offered hand, but something moved me and I leaned close and gave her a continental kiss, both cheeks. She blushed and then embraced me. Uncle George was grinning broadly. Then he drew Andrew closer to me.

"And this stalwart young man is my grandson. Dr Emma Clarke, I'm delighted to present Mr Andrew Marshall to you. But never call him 'Andy,' remember that," he chuckled.

Andrew took my hand in his—I swear a spark flew—lifted it to his lips and kissed it.

He murmured as he did, "You can call me 'Andy' anytime, Emma."

"That's okay," I managed to choke out, "I love the sound of 'Andrew.' It's so masculine."

Blimey! Where's this coming from? I'm not like that! I don't swoon over boys! Emma, get a grip!

He was still holding my hand and looking at me. I drew a breath and tamped down the fluttering inside me.

"I didn't know Uncle George had a grandson," I said accusingly to said uncle.

He chuckled. "Keeping the surprise part of my family for last, dear."

Meanwhile both Andrew and Gerry were looking back and forth at us with open mouths.

Gerry was first. "Uncle...?"

So we had to explain, but this time the girls got involved too, so the explanation came out just a bit garbled. Eventually we got things unsnarled.

Over lunch, which was like a small banquet, we got acquainted. I sat next to Andrew and we shared some facts about each other. Andrew hadn't been able to figure out anything about me from what Uncle George had told him and his sisters. I was around their age, but had graduated college, or maybe not, but yet I was in a graduate program. Or something. But I was also in high school. He figured that his granddad was either leaving something out or had gotten confused himself, you know, being old and all that. After all, Uncle George and I had never met in person.

Andrew was incredibly charming and gallant and clearly his sisters worshiped him. They were all very

close in age, so perhaps that would explain why. Andrew had just turned 16, Sam would be 14 soon, and Abi was 11 (“almost 12!”). But I had seen many sets of siblings in my schools and none were this close. Must be the diplomatic—or perhaps the military—family life?

I would love to spend some more time with this family. Gotta see how to make that happen. And then there’s that attraction to Andrew. It seems it’s mutual too. Jeez.

The press conference was to be at the embassy so I had to reluctantly excuse myself from Stuart’s family to ride the short distance over to the building. Uncle George and I went in through a private entrance and he took me to a briefing room. It was basically a small auditorium. Anston was there, fixing mikes on a table at the front.

“Sir George,” he said as we entered, “is starting now satisfactory?”

“Yes. Let them in.” He spoke to me. “We’ll wait in the wing area over there and come in when Anston introduces us.”

About twelve men and women filed in, followed by some still photographers and two videographers. I could make out the station call letters on the cameras. It took several minutes before everyone was settled down and then Anston closed the door and went to a podium stand at the table’s side.

“I needn’t inform you that this is a special occasion. The United Kingdom of Great Britain and Northern Ireland is delighted to present to the world, one of our compatriots who has unearthed a greatly significant discovery that will impact all of our lives in the near future. Dr Emma Clarke has graciously agreed to allocate us some time from her hectic schedule for this conference, so I kindly request that you articulate your queries clearly, maintain politeness and focus on the topic at hand, and utilize the microphones we have supplied to ensure everyone can hear. Are your cameras prepared? Do you require any additional time? No? Then allow me to introduce Her Majesty’s ambassador to the United States of America, Sir George Marshall, and our esteemed guest, Dr Emma E. Clarke from the University of Alaska Fairbanks.”

There was a polite smattering of applause as we walked in, followed by some gasps of shock plus not a few double-takes as we nodded to the group and sat. Anston remained at the stand at the side; evidently he was going to act as emcee.

“Mr Ambassador,” he began, “do you want to say a few words?”

“Thank you, sir,” he answered. “Mr Tieders has done an excellent job in introducing Dr Clarke, but I’d like to add somewhat more to that. I noticed that many of you were surprised at Dr Clarke’s young appearance. Yes, she is young, not quite 14 years of age. She holds a PhD in physics, and is about to receive bachelor’s degrees in physics and mathematics. She has invented a material which, when further developed, promises to revolutionize electronics, computer science, power transmission, transportation, and who knows what else.

“She did the initial work while she was still in high school and refined it at the university where she *led*, and I say again, *led* the team which demonstrated that her theoretical calculations could be developed into a practical device. Dozens of universities from around the world have been in contact with her to come to their facility to share her knowledge. Ladies and gentlemen, Dr Clarke is not an immature teenager, however young she may appear. Treat her with the courtesy and respect you would show a senior scientist. We can take some questions now, Anston.”

“Thank you, sir. Show of hands, please. First row.” he pointed.

“Dr Clarke, this is an impressive achievement. I’m Gordon Jones, science correspondent for the AP. This is two questions, actually. One is about how you have your doctorate before a bachelor’s degree.

Second, how did you get into superconductivity research? What gave you that idea?"

"Okay, sir. On the degrees, I assure you neither my university nor I got the order mixed up." Laughter. "It was simply a result of the order in which I completed the degree requirements, but yes, the uni administration needed some persuasion when it came to how fast I was completing them. They weren't used to someone going so quickly."

More laughter.

"Yes. And my research? The short answer is that it just occurred to me. I live in Alaska with my guardian. It's kinda cold there, usually." Laughter. "I was idly thinking about keeping warm whilst I was walking to school and thinking about how to power personal heaters. Heaters take lots of power. Much of the energy in power transmission is lost to resistance in the conductor. Superconductivity could eliminate some of the resistance so batteries could last much longer. So I visualized different atomic structural configurations which could allow the persistence of the... erm... particular kinds of electrons needed for superconductivity to occur. From there, it simply involved some calculations."

Laughter again, and Jones followed up, "Miss, I tried to read your papers but I couldn't make heads or tails of those calculations. Where did you study that kind of math? I'm sure that they don't teach that kind of math in British elementary schools, where I assume, from your accent, that you grew up."

More laughter.

"No sir. It's... erm... self-taught? No, that's not right. How to describe it. Okay. You look at a face. Someone's face. It's your mum. How do you know that? You always knew that. She was your mum since forever. My maths are like that. It just *is*. It's in me; when I need to mathematically describe something, the maths are there for me to use. Does that answer you?"

There were gasps from around the room at that, and people began looking at me strangely, so I needed to stop that right away. I thought of another analogous example to try.

"Okay, you still don't really get it. I'm not an android like Data or a Vulcan like Spock." Laughter again. "Take a musical prodigy like, erm... Mozart. How did he learn his perfect pitch? Take Beethoven. How could he compose symphonies or concerti or the other works he did when he was deaf? Take Michelangelo. How could he visualize the perspective needed for a person on the floor to view his Sistine Chapel ceiling paintings when he was lying on his back on a scaffold, four stories high, an arm's length from the artwork? I could go on. Think of Leonardo daVinci and his engineering marvels. And in more modern times, Max Planck, who had the amazing insight that energy radiating from atoms is composed of discrete packages called quanta, and this insight led to the development of quantum mechanics. They each had their own special gift which allowed them to be unique. It's like that with me; I simply have a mathematical gift; otherwise I'm not really different to anyone else, am I."

A woman shouted, "How can you compare yourself with those geniuses? Are you that vain?"

"Ma'am, please. I didn't say that I was comparing myself to anyone. Can you compare the wine taster who can differentiate between the wines from the same vineyard in two different years to the perfumer who can identify all of the components of the scents in a perfume bottle? Each has a skill. We all have special skills. Mine happens to be in maths."

Wow. They applauded me. I looked at Anston and nodded; he pointed to another person.

"I believe you were next, sir. Yes, second row."

"I'm Morgan Steward from *Science*. I'm trying to wrap my head around how you could um, deduce, I

guess might be the term, which elements would have the appropriate properties which might allow superconductivity to occur. After all, most if not all physicists need decades of experience to learn how to manipulate their experimental materials to get a sense of their physical properties and learn how they interact. Can you speak to that question?”

I had been expecting a question like that and wasn't looking forward to it, actually. I gathered my thoughts.

“This is an insightful question but not an easy one to answer. Early on, I read the bios of many famous physicists and mathematicians to learn about what inspired them, but mostly to learn about how to control my mind's excursions into turning everything I see or experience into something I try to describe mathematically. It's quite distracting, to tell the truth. To others, it looks like I've zoned out.”

There were chuckles from the group.

“Einstein did the same thing—using his imagination to consider physical problems; he called these mental exercises his *Gedankenexperiment*, that's 'thinking experiments,' and there were other scientists that also used that technique, so I guess that my doing that isn't so unusual. I suppose that this method of thinking is simply using one's intuition in a kind of formal way to examine a problem. I recall Einstein saying something about this too—it goes something like, erm, I need to paraphrase, basic laws can't be discovered through the use of logic. Only intuition works because it's helped by one's sense of the underlying physical order. Erm, that's close to his words. I'm blessed with a highly retentive memory and it works that way because I make connections between everything I learn. So the trivial answer to your question is that I had this feeling for how certain elemental properties would fit my problem, and then made a few very lucky guesses—which I now realize must have been driven by intuition. Yeah, Einstein again: he said, and this is a quote, 'A new idea comes suddenly and in a rather intuitive way.' Does that answer your question, Mr Steward?”

He looked at me with surprise. “Yes... and you recalled my name too. I'm impressed.”

I laughed. “Names are important, sir. I try to remember them. My first question came from Mr Gordon Jones of the AP. I'm not showing off. I love teaching and quickly learning your students' names shows that you think that they're important.”

There was a fair amount of applause at that, followed by a few heartbeats of a pause.

Then Anston pointed again. “Your hand was next. Third row on this side.”

“Thanks. Gary Wilbur, NPR science correspondent. You're giving seminars at Johns Hopkins and University of Maryland tomorrow and Thursday. The seating is reserved for faculty and students only and the hall is full. I couldn't get a seat. Could you tell us what you'll be talking about? Is it secret?”

I chuckled. “Pardon; I'm not laughing at you blokes. I had no idea that they were doing that and was amused to hear about it. No, it isn't secret. I suppose that they need the seats for people who'll be able to follow the maths. There just aren't words in English that can explain what I'll be covering. Mathematics is a language too and that's the language I'll be using. Okay, the title of the first talk is 'Rapid Fourier Transforms in the Calculation of Electron Distribution.' In that session I'll be explaining how to survey atomic structures—that is, their electron orbitals—for information about how they would perform in semiconductor substrates like silicon or germanium with the recipe of components I found which acted like a metallic hydride. This is how I got my initial idea and it's a new application of maths that I came up with to make the calculations manageable. Before this you needed a supercomputer to handle all the variables. I found a way around that.

“My other talk is 'Cooper Pair Propagation in High Temperature Substrates' and it's about the

behavior of electrons in a superconducting material. I hope that's enough of a description for you for now. For the layperson, knowing what my calculations show will give them no usable information. What is important is what the effects of superconductivity are and how that physical phenomenon can aid in the development of new technology. My work is in the theories. I don't know enough to make practical uses of what I imagine. I need engineers for that."

More applause, and people were typing frantically on their laptops whilst shaking their heads.

Anston: "Okay, ma'am. Second row opposite. Yes."

"Dr Clarke. I'm Janice Gordon, *Baltimore Sun*. I understand that in your high school in Fairbanks that you were supposed to have the Naked in School Program and that you..."

Anston interrupted. "I'm afraid that will do, Miss Gordon. I must apologize, but the direction in which your question was heading is quite offensive and uncalled for. The next hand I observed was... indeed, over there. On the right."

"Mike Klune from *Popular Science*, Dr Clarke. You mentioned creating a new application of mathematics?"

"Not totally new, just a different approach to a certain kind of problem involving calculations needed in using the Schrödinger equation. It should work in similar cases where Fourier transforms are needed. My approach seems to make those equations simpler to calculate, is all."

He answered, "Now I know exactly nothing more than before your answer, Doctor," and laughed.

Others in the room laughed too.

Anston looked around. "I notice you all attempting to generate inquiries. Dr Clarke is endeavoring to provide responses to questions that typically require a deep understanding of advanced mathematics. Ah, you have a query? Very well, this shall be the final one, as Dr Clarke must begin preparations for tomorrow."

"Yes. Nancy James, *Washington Star*. This isn't scientific and I hope it isn't too personal, but I think my readers would want to know how, as a young teen, you became so incredibly self-possessed and secure in your knowledge. You handled us old reprobates here like a seasoned pro, like you've been doing it for decades—and this is apparently your first news conference. You explained highly technical things with great patience and tried to make sure we understood what you were saying. You weren't flustered when challenged. I can't imagine how a fourteen-year-old could face us professional vultures with your degree of aplomb, and that's not even considering your technical achievements. So my question is, 'How did you get to be the way you are?' I hope that's not overstepping the rules for this conference."

Anston shot a look at me and I gave him a private thumb's up.

"I'll try to answer, Mrs James, but you do realize that you've asked me to psychologically analyze myself, don't you."

There was laughter from the group again and I saw a lot of relaxed expressions out there. I guess they're really on my side now.

"I think I got to be this way—socially that is—'cause when I was little... erm, littler than now, anyway..." gesturing at my body. There was lots of laughter now. "...I didn't fit in. I thought everyone could do what I did and see what I saw. Kids react to those who are different, so I soon learnt that I needed to rely on myself. I became very, very observant, always looking for clues about the people around me and how they interacted. When I saw a behavior which got a good response, then I modeled

it. If I saw something that turned out not so nice, I avoided doing that. So I suppose I was building a framework in my personality that I could always use for my own mental support system the way lots of people form interpersonal social support systems. But those external social systems can be weak in certain ways because different personalities are involved and they tend to compete with each other. My own personality grew to be strong because I kept building it up. But still, I greatly miss the social support system that does involve other personalities, because the multiple minds involved provide a different kind of strength—and flexibility too, that I can feel missing in me.

“I’ve been rambling... I hope I didn’t bore you all.”

“Dr Clarke! Dr Clarke!” rang out. Anston pointed to the loudest caller.

“Ma’am, I’m flabbergasted and amazed, miss. I’ve never heard a more outstanding self-analysis, and you did it cold. Oh, I’m Dr Mark Southerland and editor of *Psychology Today*. I came, not for the physics, which is so far beyond me that I might be in a different galaxy, but for my research on how scientists interact with the lay media. I wanted to see how a young scientist would do in her first press conference but I never expected to see someone so young. And the answer you gave? Impressive. Have you ever taken psych classes? No? Well, you appear to have an innate understanding of the mind that matches your innate knowledge of math. That’s all I can say. Thank you.”

Not much more happened. Anston closed the meeting as the group applauded again and then he ushered them out of the room, making sure no one stayed behind. Uncle George took my hand.

“That was masterful, my dear,” he said. “They were prepared to be skeptical, even hostile, but you disarmed them from the beginning. I don’t think that they expected your form of dry humor, either.”

“Yeah, I hope the group tomorrow will be easier to talk to. At least they’ll understand the maths I’ll be using.”

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I left for Johns Hopkins early on Wednesday morning; I had been invited to meet with several faculty in my field before having lunch with the seminar sponsors. The seminar would follow. Uncle George hadn’t been kidding with me about the transportation. I traveled to Baltimore in style—in an embassy stretch limo accompanied by a sergeant from the Royal Marines led by a state trooper cruiser. As Uncle George had told me, “They will be escorting a precious resource of the British Crown. Of course we need to protect you.”

The morning’s meetings and the luncheon went well; I shared stories of my many missteps with these people—fellow physicists—who were at stages, amused at my stories of some dumb errors I had made (my lack of learning some basic principles showed here), and sympathetic about my problems with my uni’s administration (their resistance over my skipping so many steps on my way to the degree).

The seminar was held in a large classroom capable of holding about 120 people. It had a video projection system and a brill display panel which allowed me to write on it and have my scratchings appear on the projection screen, just as if I had been writing on a blackboard. We entered the room early so I could get familiar with the screen controls, pair up my laptop with the projector, and organize my notes (for the hundredth time, at least). I was sat in the front row reviewing my notes when the room began to fill. My host motioned for me to stay seated there.

“Come up when I introduce you,” he told me.

I nodded. Then the session began and my host gave me a very gracious introduction. Then he called me up. I stood and walked to the lectern.

All movement in the room stopped. You know, the shuffling, jiggling, whispering, and fussing that's common in a room of over a hundred people. It all stopped. Dead silence. Every eye was on me as I put my notes on the tray in front of me. I looked out over the group and smiled.

Suddenly someone spoke loudly, "What is this, a joke?"

Another. "Who's the middle schooler? Dr Clarke's daughter?"

Another. "We don't have time for practical jokes, Dr Wilson!" This was directed to my host.

I put up my hand. "Okay. I know my appearance is a surprise to some of you. I assure you that I am indeed Dr Emma Clarke, I have an earned doctorate in physics, and I'm the sole author of the articles on superconductivity which have recently appeared in *Nature Materials* and *Physical Review Letters*. The title of my talk this afternoon is 'Rapid Fourier Transforms in the Calculation of Electron Distribution.' Please, stay for my presentation and then you can judge if this talk is an elaborate hoax."

A few people got up anyway and stormed out of the room but their seats were rapidly filled by standees. Standees? Jeez.

"All right? May I begin?" I asked. "Good. So the mathematical topic we'll be discussing now arose when I..."

I finished about 45 minutes later, summarized the points I had made, and asked for questions or comments and then the whole room rose in an ovation. My host came up and shook my hand.

"Dr Clarke, that was extraordinary," he said to me and the group, speaking into the mike. "Your development in math gives us an amazing tool in working with electron cloud interactions in normal and condensed matter. Now we have time for several questions of general interest. If you have specialized questions, please save them for Dr Clarke to ask during the reception which will immediately follow this session. Ok, over there. Carl?"

Carl asked his question. About a dozen more followed, after which we relocated to a large conference room (which barely accommodated everyone) where some finger snacks and drinks had been organized. I wandered around the room, fielding some questions but mostly accepting accolades. If my face got any redder, I think it would burst into flame.

## Chapter 7

At lunch on Thursday, this time held at the University of Maryland, one of the faculty members dining with us asked a question about my experience in getting a doctorate so quickly, almost before taking a bachelor's degree, let alone finishing high school. "Wasn't it difficult to convince the administrators?" he asked.

I laughed. "Yep, it was. I kinda backed into getting the degree. The uni president even had to check with the trustees since they have this 'residency' requirement—lots of schools do—where you have to be enrolled for so long and have earned so many credits to be eligible. So I got a waiver. But you know that the doctorate isn't granted for simply checking off items on a bucket list. It's awarded as an acknowledgment that you've demonstrated enough academic independence that you can create new knowledge. You know that. So if someone has demonstrated complete mastery of a subject, plus mastery of the areas which relate to that subject, and then uses that mastery to create new knowledge, by definition he should be eligible for a doctorate. Isn't that right?"

There were general nods of agreement.

"That's what I had to tell the president to convince him. I also used one of my favorite dissertation stories, one I had heard from my mum, who had a master's in biology before she took her medical degree. She had told me about this Scot bloke in the 1880s, erm, name of Caldwell, I think, who had written the shortest dissertation ever. Four words and sent by telegram. It got him the equivalent of a doctor's degree... from Royal Society or Cambridge University. Something like that. Anyway, I can recite the whole dissertation. It's 'Monotremes oviparous, ovum meroblastic.' It's a hoot."

"What's that mean?" my host asked.

"I need to explain. So Caldwell went to Australia to study the platypus and other monotremes, being sent by his advisor. There were all kinds of arguments up to that point about whether platypuses were mammals, reptiles, or birds, but naturalists had finally settled on them being mammals. But it was insisted that they couldn't lay eggs, 'cause no mammal did that. Caldwell went to investigate. So his telegram meant that platypuses do indeed lay eggs which are similar to those of reptiles. 'Meroblastic' means that only part of the egg divides as it develops, like those of reptiles do. So that telegram got him a doctorate. It's a good example of an independent discovery of new knowledge. Also it didn't hurt that my own discovery really boosted the uni's reputation and started to attract some student interest to come study there. Money does talk."

They all laughed.

"Emma, you're a fount of knowledge," my host complimented. "Not only in physics. I also can see how convincing you can be. You have a unique way of explaining yourself so that the person goes away satisfied, and you've made him feel that you thought his point of view was important too."

The beginning of today's seminar went much more smoothly than yesterday's, in that by now everyone knew that I was not quite 14 years old. And since this talk was about solid-state physics and not primarily about maths, the audience was a little different. But this was a well received session too.

I was tired when I returned to the embassy that night; it had been a long day. They had a scheduled a formal dinner at Johns Hopkins for me and the university bigwigs were in attendance. Yes, I did get some questions about whether I'd be open to an offer of a professorship. I told them that I was exploring my options. It's a good way to say 'no' while not saying no.

I would be flying home on Saturday, so the Friday was open. I had thought of using the day to see a little of Washington. When Gerry had heard that I was staying over, she offered to give me a little tour,

and since the kids were just out of school now, they would come along. I had a wonderful time. I realized that there was a huge missing part in my life; even when I was living with Mum and Grandma, I had never experienced this kind of emotional closeness before. It helped that the siblings were all extremely bright kids, but it was their maturity, despite the girls' impulsiveness and irrepressibility, that really called to me. Spending time with Andrew, just chatting about random things, was also amazing. So was his London accent. Is that how I sound too? It seemed it was. I guess I miss London.

Much of my tour was just drive by of some attractions and monuments, but we also went to the Smithsonian Natural History Museum, where we stopped for lunch. Parking was a non-issue as Gerry's car had diplomatic plates. When we got back to the residence, we kids had some time to talk before dinner. Earlier Uncle George had left some papers for me to sign—not that they had “legal” validity; they just showed that I was the person making the emancipation request, and they had been set out for me to sign.

Then the girls dragged Andrew and me to the sitting room; this was the first time we kids were alone all together.

“Gramps told us that you had that awful naked pupil rot in your school,” Sam said. “I wanted to ask about it because it's supposed to start here in the autumn. That's when I start high school and Dad'll be posted here for the next few years.”

Andrew spoke. He was sat next to me, holding my hand, whilst the girls were sat on the floor at our feet.

“Sam's been bugging me to find out more about it, Emma,” Andrew said. “One of my mates in school has a cousin over in Reston and the Program had started in her school in the spring. But she's been too embarrassed to talk to him about what she saw there and none of my mates know much about it either.”

I sighed. “Well, I can't give you much help about what goes on in a school with the Program either, I'm afraid. I only know what I read in the booklet they gave out. Yes, they tried to start the Program in my school, and in fact I was picked to do it along with fifteen other blokes in the first group, but nothing came of it. We got it stopped—cold,” I giggled.

“Yeah, Gramps told us!” ... “How did you do that?” ... “What you did was brill!” they chorused.

So I told them the funniest parts. Only in retrospect were they funny. Not while it was happening, though. They laughed at the appropriate spots in my tale, too. No, I'm not good enough to do stand-up comedy, though. Even so, this was almost more fun than those two seminars.

“I don't know how I'd deal with being forced to be in the Program,” Sam said. “I wig out just at the thought of being forced to do that rot.”

“I do too, Sam,” I told her. “The idea that I'd be forced to be all starkers in school completely terrified me, not to mention how I felt when I saw all the horrid scenes in the video they played for us, as well as the other nasty tosh that they made kids do that I read about in that Program booklet. But when they were going to strip me, I managed to get out of it, tricking them like I told you. But I did learn that physically forcing you isn't legal, and neither is making threats. After I was able to fool them about my fainting and get away, I found out from my solicitor that if an adult touches a kid with the intent of injuring him, it's a felony called battery 'cause stripping someone by force is actually a legal kind injury. He said the punishment can be as much as twenty years in jail. If an adult even just tells another to strip you, then that's assault—it's deliberately making you believe that you'll be harmed somehow. You don't have to be touched to be assaulted.”

“So if you get in that situation when the Program starts in your school, you all can resist and they can’t forcibly strip anyone without risking a long prison sentence. But I did learn that to keep out of trouble, you mustn’t become known as the resistance leader. At least don’t do it the way I did and recruit a gang of militant rebels. You must never tell anyone that they shouldn’t participate. You must only tell them that they have the *right* not to participate when they’re told to do it. They have the *right* to resist, not that you told them that they *should* resist.” The memory of that time resurfaced and I shivered.

“Yeah, that was a scary time, innit. When they were gonna strip me, I was sheet-fill-me-boots scared... the idea of being starkers by myself together with only a few others... that idea alone was just horrid.”

“That’s brilliant advice, Emma,” Andrew said as Sam nodded her agreement.

Then Sam heaved a sigh. “Okay. I get it. I think that when they start the Program, I’m definitely gonna tell everyone that they can resist if they want and they can’t be forced to do it. The idea of being forced makes me furious, not only for me, but for everyone else too. But, well, I suppose I have a different feeling about the nudity to you, Emma. I don’t feel the same as you do about public nudity itself.”

“Really? In what way?” I asked.

“Okay, I’ll try to explain. In our middle school health class this past spring, the school gave us an introduction to what will happen when we started high school with the Program being there. They told us about all the sex things that Program kids have to do. Some of the girls almost got sick hearing that rot. They were whinging, ‘We’ll have to suck on a boy’s willie? They pee from there!’ And ‘I have to let just anyone in the whole school put their fingers up my vag?’ Actually the whole idea of the Program sounded totally horrid to me, too, just like it did to the other girls. Doing any of that sex cack—that would be a nightmare. Not the nudity part by itself, except that being nude where almost everyone else is dressed would be so strange. Otherwise, being nude with other people isn’t a problem at all for our family because at the park, everyone... oops...”

She flashed a panicked look at Andrew, who told her, “Hey, Sam. Go talk to Mum and ask.”

*What? Sam? Nude with other people?* Now I was confused.

“Andrew, what’s...” I started as Sam got up and ran out.

“Hey, it’s nothing. I reminded her that she needed to ask Mum something, is all. Look, I’ve been meaning to ask you what all the fuss is about the maths you use.”

Abi made an “oh, really?” face at Andrew.

“Well, Andrew,” I replied, “the maths are kinda advanced, but let’s see... you’ve dealt with quadratic equations, binomials, and multiorder polynomials, I assume? That’s in tenth grade maths, I think.”

Abi interrupted, “Ooohh, binomials and polynomials—what about homo nomials? Lezzie nomials?” she chortled. “That’s way sexier than maths!”

“Bugger off, you little imp!” I laughed at her.

“Ugh. Maths. You guys’ll be soooo boring. I’m gonna see where Sam is.” Abi ran off, shrieking with laughter as she skipped out.

I shrugged. I figured that if what Andrew told Sam was important, the girls will tell me; else they’ll burst. I turned to Andrew.

“How much maths have you taken so far?”

“Actually, Emma, I was in twelfth grade maths last year,” Andrew commented. “I’m taking AP maths this autumn.”

“Nice. Do you know what calculus is, Andrew?”

“Sure. My teacher has extra sessions for advanced kids.”

“Okay, differential equations?”

“Yeah. I know a little about that.”

“That’s ace. How about partial differentials and multiple integrals—that is, surface and volume integration?”

“I won’t do that before college.”

“Look at this, then.” I pulled out my mobile and brought up a copy of my last paper; then scrolled to one of the generalized Fourier series equations. “Can you see what this equation is describing?”

I pointed to a second-order linear partial differential equation and told him the values of the variables.

“You work with this? Wow.” He looked at it for a minute. “It looks like it could be something that repeats, doing it over and over.”

“You saw that? I was trying to do something that wasn’t very nice, to show you that you wouldn’t understand the maths that I work with. I think you really do understand. Actually that equation describes a wave, and yes, it repeats over and over. If you saw that from what you learnt in high school maths, that’s really impressive, Andrew. I know it’s early still, but do you have any idea what you’d like to study?”

“I like maths. That’s why I asked you. We did some statistics in maths earlier this year and that was brill, and I like calculus too. I’d like some kind of job that uses maths a lot, I guess, and...”

Just then the sisters came roaring in, jabbering with excitement. And began speaking all at once.

“Mum told us...” Abi.

“This is brill...” Sam.

“...she said that...” Abi.

“...we won’t have...” Sam.

“... they won’t let...” Abi.

“...to do that...” Sam.

“Wait. Wait. *Wait!*” Andrew shouted. I had to giggle at the girls’ sheer enthusiasm.

“Now then. Slowly. What happened?”

Clearly he was used to this.

They looked at each other and Abi nodded to Sam. “It’s more for you, sis,” she said.

Sam took a deep breath and this is what emerged, all on that one breath. “I went to ask Mum about our resort trips but she sat me down to tell me that I shouldn’t get all worried about the high school’s naked rubbish ‘cause Gramps called Mum just a few minutes ago and told her that the Foreign Office decided that they won’t allow British kids to be in that bloody Program and then Abi came in whilst Mum was telling me that and then we talked about the resort we go to and why being naked isn’t a problem for me so she said we could tell you but you won’t let anyone else know, you won’t, will you.”

“I’m really confused now,” I said, trying to make sense of what Sam said. *Was she talking about two different subjects, or just one? Or more?* “Help?” I pleaded.

Andrew chuckled. “When Sam gets excited, her words come out like a stream of consciousness. What I think she means is first, none of us will have to be in the Program. Second, public nudity doesn’t bother her—or any of us—because we go to a nudist resort and we’re actually nudists.”

*Well, blow me down. What does that mean, to be “nudists,” exactly?* I thought. Well, I thought I thought it. I must have thought it aloud.

Abi laughed and said, “What ‘nudists’ means is that we go to this brilliant resort where nobody wears any clothes and we all go swimming whilst nude and hot tubbing and playing sports like water volleyball and frisbee and badminton and hiking on the trails and dancing and picnics and stuff and have bands with live music and contests and cookouts and live in a camper and play with lots of other kids and... and...”

She did it too; but ran out of breath before she ran out of words, apparently.

“Abi’s talking about a nudist resort we go to near Annapolis. It’s not far,” Andrew said. “And it’s blindin’ ace, being outside and also going swimming whilst starkers. So the being naked whilst in school rubbish wouldn’t be so bad for Sam and me, but if you’re the only one being naked and no one else is, and they can touch your dangling bits or put their fingers in girls’ fannies, then that’s bloody nasty. It’s dead wrong too. Now, about going to our nudist resort, we don’t tell anyone about our lifestyle and people who go there like their privacy, so you’ll keep this quiet, won’t you.”

“Absolutely. I’m fascinated by this, Andrew. You need to tell me more. How do...”

Just then Gerry came in with Stuart.

“Evening, Emma,” Stuart said. “We just heard the kids revealing our great secret to you...”

“I’ll keep it quiet, no worries,” I said.

“Good. Well, something else’s come up. It’s wonderful news for you, Emma. Dad just rang us a minute ago. They found your Uncle Scott and he’s alive, but very much worse for wear.”

“What! Ohmygod. What... how...” I jumped up.

“Okay, sit, sit down. It’s a long story but I’ll summarize because the details aren’t important just now. He’s in a Seattle hospital now, moved there last week from Anchorage. He has an almost complete amnesia about what happened to him but the Aleuts who found him figured out something of what likely happened.” He consulted a pad. “You know he was flying to the Aleutians for some kind of field project.”

“Yeah. And there was an unexpected early winter storm in the area.”

“Indeed. He was found drifting in the ocean by a fishing boat by some Aleuts out of St George Island.” He laughed. “Very appropriate name too. It’s in the Bering Sea, not near the Aleutians. He was blown off course and crashed, I assume. He was found with no life raft, only a survival suit.”

“His plane had floats; maybe he was able to land in the water and then something happened.”

“Yes, probably, since he survived. Now he has a partially healed skull fracture and some brain swelling still and it needs surgery soon.”

“Oh god, will he live?”

“The hospital report was that he’s stable, but unless he gets some highly specialized surgery and a lot

of rehab, he won't recover. Even then his ability to walk might be affected."

I was crying now and Andrew put an arm around me.

I sniffled. "What took it so long to get him help?"

"There was that early winter storm and the ice had formed very early too. The Aleuts out there are self-sufficient. Maybe their radios can't reach the mainland and if there's electrical interference, even stronger radios can be iffy. They don't take the boats far in the winter because of the ice. Your uncle was wearing a Royal Navy survival suit..."

"Yeah, I remember that suit. He told me that he had got it as surplus, said it was the best."

"...so the islanders assumed he was from a British trawler. They were trying to reach any nearby trawler, thinking Scott was from one of them. Your uncle couldn't say much, but had a Brit accent and said 'Elizabeth' a lot."

"Oh. I'm gonna lose it. That was his pet name for me. My middle name." I was really crying now.

"Well, the Aleuts thought he was referring to the Queen. Anyway, they finally had made contact with a trawler who relayed a distress call to a British ship in the region and they got him off the island in mid-May and got him to Nome. That's where they first brought him in, and got him into a hospital there. No one knew who he was, so they assumed, from his accent, that he was a Brit, so after trying to locate any British vessels in the area, they finally contacted the British consulate to see if any knew of any British citizens that were missing. The consul recalled that Dad had been there to deal with a question involving one of our citizens, you, Emma, so he checked and discovered your Uncle Scott was on a company exchange visa and had gone lost. So now he was found. They moved him to Anchorage but the hospitals there weren't equipped to handle his case. They contacted his company and they had him transferred to Seattle where the hospitals are better equipped."

I got up. "We need to get him some top care! I assume Seattle has good hospitals but... but... the U.S. president goes to the... erm... Walter Reed Hospital, right? They operate on all those IED injuries from the Iraq wars and Afghanistan, don't they?"

"Yes, but..."

"I can pay for his treatment. He'll be close to the embassy here too, won't he. I can't do anything for him in Alaska. And..."

Uncle George came in then. "I heard, Emma. That sounds like a good plan to me. He'd get excellent care here, too. That's a military hospital, you know, so I might need to pull some strings. You should know that your uncle turned up with... erm... an associate? When he was rescued from the sea, an Aleut woman took on his care. She must be an angel because she did everything right to stabilize him; she saved his life. And now she won't leave his side. As well, he's become attached to her, from what we've been told."

"Can we do it? Bring him here?"

"Certainly. If I need to, I'll organize an emergency visa of some kind."

We put the plans in motion. I flew back home on Saturday, but changed my flight so I could stop in Seattle to see Uncle Scott. I got in too late to visit him, so I went straight to my hotel.

The issue about a minor reserving a hotel room problem was solved by having the U.K. consulate in San Francisco reserve and prepay for a room in my name. The "doctor" title caused a few raised eyebrows at the hotel reception. I got my room key card and was all set.

Early next morning, I went to the hospital. He recognized me! We both cried as he held me, then he whispered to the woman with him (her name was Mary Ayek), “This is my Elizabeth.”

She hugged me.

“Uncle Scott, Mary, they’re gonna move you to Washington—D.C. that is, to one of the big specialist hospitals there. Mary, is it okay for you to leave your people to be with Uncle Scott?”

“Yes, I will miss them but I have no one to keep me there anymore. I lost my husband and son in a fishing accident years ago. Your uncle now holds my soul.”

“You must hold his. You saved his life.”

“I have had many accidents to treat in my life. I learned to heal many.”

“Are you okay for money? Do you need anything?”

“No, your uncle’s company has been helping with a lot of things and the British people in San Francisco have someone working near here coming in to check on Scott every few days.”

“Good. I’m going home to Fairbanks but I’ll be back very soon. I’ll let you know how to reach me in the meantime. If they move Uncle Scott next week, then I’ll need to go to D.C. to set you both up. Meanwhile, it was wonderful to meet you.”

We hugged and then I went to Uncle Scott’s bed. I leaned over.

“It’s so good to have you back again. Now it’ll be my turn to take care of you.” He smiled. “You’re gonna get the best care, but I doubt that it’ll be better than Mary’s care.”

Uncle Scott really grinned then and I kissed him.

“Bye!” I hugged Mary and left.

I had to catch my flight to Fairbanks. I arrived home about 3 p.m. and got caught up with Mrs F. She was so happy that my uncle was alive but was sad that I was moving away. She was touched when I told her that our house was my gift to her; she insisted that it was too much, but acquiesced when I told her how much her friendship and support meant to me. I had looked up to her as my all-but-de-facto mother during those two years. I told her that I was going to have my uncle’s stuff packed up and moved to D.C.; I didn’t have many things of my own to move. A bit later, my housemates showed up and I told them what was going on and that I was moving away. Some tears were shed.

On Monday morning, I had a lot of work to do to get ready to leave Fairbanks. My first stop was to meet with Mr Jameson. I asked him to transfer the title of the house to Mrs F; to organize a bank card and mobile phone to be sent to Mary Ayek as soon as possible, and to contact Uncle Scott’s company to let them know of his hospital transfer. I asked Mr Jameson to smooth over any remaining worker’s comp and medical insurance issues for my uncle and see about any early or medical retirement possibilities. Scott had worked for them for quite a few years and they were a multinational outfit.

Then I stopped by my high school, met with Mr Smith, and told him the news. He had gotten the tutoring program set up to include some uni students and was happy with his fall plans. He had some really weird news: While I was away, a writer from a national tabloid (he wouldn’t give the woman the honor of calling her a “reporter”) showed up at the high school demanding to be given copies of all photographs of pupils in the Program.

I was incredulous. “What? What photos?”

“Other schools which run it take photos, usually of class demos, and put them on the school’s

website,” he answered. “I don’t know what Hayward was planning about doing that. Anyway, the woman wanted the photos and claimed that we must have removed them from our site.”

“What was that all about?”

“I told her we had no Program and no pictures, so she went to the District office and told them that she was making a freedom of information request and that we would have to prove that we had no photos.”

I laughed. “She’s asking for evidence of absence, believing that any such photos are missing. Instead, she should be made to show that she has evidence which proves that photos indeed exist.”

“Exactly. I’m mentioning this to you because you’re involved and I wanted to alert you. When she finally realized that she was getting nowhere with Program pictures, she specifically asked for ones of you and the District office people told her we had none; besides, as you’re a minor, your privacy is required by law. Then she asked to see copies of our yearbooks and since you weren’t in any, she got abusive and let slip that she wanted to write an article about you; that you were a fraud and your accomplishments were all fiction; and she wanted naked pictures of you for the article.”

I was speechless.

“Emma, you need to understand that there are people like that out there. Some of them make a living by trying to discredit others. If she got a photo, I wouldn’t put it past her to Photoshop it into a naked photo. So my advice, now that you’ve got some notoriety, is to be careful of any privacy you can maintain.”

Blimey. This was disturbing news. We finished our discussion then and I left after wishing each other well.

My final stop was at the Physics Department. I had an absolute *ton* of posts waiting for me; take me weeks to go through them all. Most seemed to be about my giving talks. I met with my professor and told him that I’d have to move to be with my uncle. I was sorry that I couldn’t remain at UAF, but he said that it was clear that I was destined for greater things than teaching at a remote university in the frozen north. He would miss me and the excitement that I brought to the department. We went over the work he had been doing; as well, we discussed the work in the Engineering Department on my project. We mapped out some ideas that I had been considering about refining the chip structure, so we visited the EE people who could try out my suggestions. My trust was funding this work and it wouldn’t stop because I was moving away. I planned to keep in close touch with these people; they were really talented.

The uni also had a gift for me; they had given up any further resistance about my degree programs and the provost and president had agreed that all of the independent study papers I had written for the required courses in my bachelor’s programs had met the uni’s standards. I heard (through unofficial but reliable sources) that the trustees feared that the uni would get some bad publicity if it turned out that the bachelor’s degree was being withheld from one of their star students who had already been awarded the doctorate. My prof gave me a letter from the uni registrar which confirmed that I had completed the requirements for my bachelor’s degrees in physics and maths.

Well, the next regular graduation ceremony is in May, in a year. But the diplomas would read that the degrees were awarded this June. Including the diploma for my doctorate.

Then I returned home and began packing my stuff and Uncle Scott’s. Mrs F came in with Joyce to help me. She was still stunned by the gift of the house but was very thankful at my generosity. I reminded her again how she was a surrogate mum for me. More tears were shed. By Joyce, too; she had begun to view me as her older sister—even though she was much the older one. Strange how that works.

By Thursday, everything was ready to go. I had engaged a removal company to box up all our possessions and ship them to D.C. and packed myself—two bags for me this time—and then got a ride to the airport with my professor. It was a late night departure, an overnight flight with a change in Seattle that left in the early morning. He wanted to get me there early, he said, because he heard that there were going to be a lot of people going to the airport that evening. I assumed he meant to fly, so the surprise was on me! About half of the department was there to wish me a bon voyage! The TSA people were clearly fascinated with our little event ‘cause they kept stopping by our group to ask if everything was okay. Or maybe they just needed to check to see if the refreshments that our group had put out were safe for an airport. Yeah, maybe that’s why.

My time living in Alaska was over. A new chapter was about to begin.

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The fourth of July in the U.S. capitol was an experience. And a little bit surreal too. It’s Independence Day, you know. Independence from whom? That’s right. So excuse me if the response from the British embassy wasn’t overly joyous. Yes.

Uncle Scott and Mary had arrived in Washington about three days after I did and they set him up in Walter Reed Medical Center. Uncle Scott was actually a veteran—before he took his PhD, he was a member of the Royal Navy’s Commando Helicopter Force and had served in the Gulf War supporting a joint British-U.S. unit. Who knew? That helped Uncle George with a bunch of strings that he needed to pull. Scott would have to pay for his care, but he was entitled to some compensation from his employer’s disability plan, some from his health plan, and some from the U.K. government. My trust could cover any shortfall.

Gerry helped me find a small apartment that Mary could live in because they wouldn’t let her stay at Scott’s side all the time. I stayed at the embassy residence for the first few days I was back in D.C. and on the following weekend, Stuart and the family came for lunch. That’s when Stuart asked if I’d like to stay at their house for as long as I needed to and when I accepted, I thought the girls’ squeals would split my head. I think when the sound wave hit 10 Downing Street, they must have thought that the Yanks had rebelled again.

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July kinda flew by. During the month, Uncle George and Isabella (she had told me to use her Christian name) came by the Marshalls’ home fairly frequently and we were regular visitors at the embassy residence. On one of those visits, I mentioned to Uncle George the disturbing news about the tabloid writer that Mr Smith had told me about when we said our farewells.

“Uncle George, this has been bothering me,” I told him. “When I stopped at my old high school to say good bye, the principal told me about someone who stopped by the school looking for naked pictures of me.”

“What?” he exclaimed. “Tell me what happened, please.”

I related everything Smith had told me.

“Well, Emma, you’re perfectly justified in being concerned. This isn’t any ordinary smear campaign. Someone had to pay for her flight to Fairbanks, and somehow that woman found out about the Program there and with you being her target...” he trailed off. “Someone is trying to damage your reputation, it would seem.”

I had a thought. “Hmm. Is it possible that this is some kind of retaliation from the Program office? Maybe they...”

“Yes, Emma, that must be it!” Uncle George interrupted. “They couldn’t do anything official or make a contact that could be traced back to them... but... yes... perhaps a ‘leak’ to an unsavory writer, with just enough information to imply that the leak could lead to a possible exposure of a scandal, was the intent here. Or possibly this was personal, a retaliation by the enforcers you got arrested. Whatever it was, your principal was correct; you’ll have to carefully guard your reputation.”

“Blimey,” I moaned. “Just when I thought I was shot of the Program. I hope they don’t realize I’m not in Alaska anymore.”

The next time I saw Uncle George, he brought up the issue of my emancipation petition. He had learnt that making the arrangements remotely was just too difficult, and a simple trip back to the U.K. wouldn’t work either. That’s when I realized—I should have thought of this sooner—that if I really had joint citizenship through my mum, perhaps a U.S. court would emancipate me. So I asked.

“Uncle George, if my mum was born in the U.S. and I had records in her name to show that...”

“Oh blimey! Emma! That’s right, she must have been a citizen—I believe your grandmum was too. Yes, when I met your grandpa, they were expecting a daughter and I do remember when she was born.”

“But the papers are in a safe deposit with my London trustee.”

“I’m sure the U.S. State Department has a copy or a record. I’ll check on it on Monday.”

“Does that mean I’m a citizen here too?”

“I’m fairly sure. The citizenship rules have been changed somewhat over the years, but if she was a citizen, you as her child should be, even if you weren’t born here.”

So by mid-week, we had all the answers plus the needed documents, including faxed copies of my mum’s citizenship records, and an emancipation petition was being prepared. It would even have the support of my current legal guardian, Uncle Scott. And I was living in Stuart and Gerry’s house now. I had insisted that my acceptance of their offer to have me live with them was conditioned on my contributing to their household expenses. They had a lower level in it that had an area which was almost like a little bedsit with a combination sitting area-bedroom and a loo. No kitchen though.

Having my own almost-family now was an indescribable pleasure and joy and I spent a lot of time with the girls. And Andrew. No, nothing you’d be interested in happened between us. He and I spent a lot of time working on maths. It was so much fun showing him some new techniques and he soaked it up. The girls were annoyed, but tolerant, about how much time I spent with him, but I gave them lots of time too. And they taught me all about shopping. No, not shopping as you know it, where you go to a shop, select what you need, and hand over some money. They did shopping as a competitive sport where scoring the best bargains earned you the highest marks.

I tried to continue my work but missed the computer facilities I had at UAF. I had a really fast tower computer, built for gamers, so it had a lot of graphical processing power which I could employ to visualize my computations, but it wasn’t enough. Where could I continue my research? My mind was bubbling with things I wanted to try out. I did an on-line search for nearby colleges that I could approach and saw that the main campus of the University of Maryland was right here, practically in my back yard—the Marshalls’ home is in Langley Park. I hadn’t realized the UMD main campus was so close, since my seminar had been at their Baltimore campus. But Johns Hopkins actually had a major advanced physics research facility not that far away! The university’s Applied Physics Laboratory is in Laurel, only about 12 miles from here.

I looked over their site. It would be a perfect fit to support my work and had superb engineering

facilities as well. So I rang up my JHU host from the June seminars and asked him about getting guest researcher privileges at their lab and he almost dropped the phone in his excitement. It appears that a fair number of the people at my second seminar worked at the APL and were mightily impressed with my work. There would be, he assured me, no problem at all in making whatever arrangements I needed. I gave him my current address and confirmed my other contact information was still current. He said that he still had a copy of my c.v. (add a BS in maths and a BS in physics to it, I mentioned) and publications list (oh, I've had another paper accepted, I told him, and gave him the details), so he now had the latest version.

I was also able to get back to my running—and now I had company too! At least part of the way. Early most mornings I got out and ran. The Anacostia Trail System passes close to our house and I had mapped out three five-mile courses using parts of the trail. Andrew ran with me, part of the way, since he couldn't keep up with my pace for the whole distance. He was improving, though!

Several times a week I visited Uncle Scott and Mary. Scott had brain surgery (sounds awful, right?) but it was “only” to remove some scar tissue on his meninges where it extended into the arachnoid in the area where he had the depressed skull fracture. The compression caused by the scarred area was the most urgent problem to treat. Some surface blood vessels in the pia mater needed resection too; the pressure there was limiting blood supply to the underlying areas. Fortunately those vessels weren't completely blocked or broken; that would have caused a stroke with a very uncertain prognosis. In Scott's case, the docs felt that relieving the subcranial pressure, fixing the blood supply, and repairing the fracture properly, would be the only surgical intervention indicated. The rest of his recovery would involve physical therapy because scans of the rest of his brain showed no other significant pathology.

Uncle Scott's memory was still patchy but he was beginning to recall things. When I told him about my past year (heavily edited, very heavily—nothing about the naked cobblers), he was delighted and proud of what I had accomplished. I told him about how well Mrs F had taken care of me and my gift of the house to her. He approved and said that was the absolutely perfect thing to do. He had already heard about how his company was going to deal with his medical retirement and was satisfied with the arrangements. Mostly he talked to me about Mary and how she had nursed him and tried to communicate with him when he was conscious and lucid.

“I was in a near coma for a month and they were afraid to move me. Then the ice came in. They had radios. But the f'ing electrical storm that fried my plane's electronics and threw me off course damaged the only long-range radio on the island too, so they couldn't reach anyone till spring began and the ice began to clear,” he told me at one point. “And you've heard the rest.”

## Chapter 8

August is my birthday month. Also, Brits traditionally get a month off for holiday each year and Stuart usually took his holiday in August. In planning their holiday this year, the Marshalls included me in their discussion.

“You remember that we told you that our family’s nudist—we go to a nudist resort?” Gerry asked. “That was when we learned that Scott had been rescued and we dropped that discussion.”

“Yeah,” I replied. “The girls—Abi—was going on and on about how brill all that was.”

“Yeah and we’re going again!” Abi enthused. “We didn’t get to go at all in July this year and I miss my friends there!”

“You go a lot?” I asked.

“Every weekend!” Sam. “Mostly.”

“Oh. I hope that I haven’t been keeping you from going,” I remarked.

Stuart shook his head. “No, I’ve been busy most weekends this July and the others don’t like to go without me.”

Gerry looked at me. “You could stay with Dad for the month we’re away...”

The girls jumped up and grabbed me. “Please come! Please come!” they chorused, each one pulling on an arm.

“You’ll see, it’s ace!” Sam.

“There’s lots of things to do!” Abi.

“You’ll meet our friends. You’ll love them.” Sam.

“We swim and lay out and play games all the time.” Abi.

Of course, that was all said simultaneously so I had to parse what they said. *Hmm, Einstein did some calculations involving simultaneity... oops, there I go again.*

Stuart and Gerry were smiling indulgently. Andrew was looking... hopeful? anxious? He hadn’t spoken. When he saw me glance at him, he did speak.

“Erm... Emma... I would be delighted if you would come with us. You’re like part of the family now.”

Awww... I had to go over and hug the bloke.

“Well, I don’t know. Remember what I told you about that naked in high school rot. How I did everything in my power to get it stopped.”

Stuart laughed. “And you did it up royally too! Dad still can’t believe how you orchestrated that whole business—and even got the people who tried forcing you arrested! But our resort is nothing like that. Hey, first thing, it won’t be sub-freezing there!”

I laughed. “Yeah. I’m still trying to get used to the 30-degree days here.”

Didn’t have to convert for them. They were Brits and knew I meant high eighties and above.

“Wait until you feel a breeze on your bare skin when it’s 90 degrees out,” Gerry put in.

“True,” Stuart continued. “This is nothing like what I imagine that ridiculous naked school program is like. Everyone is nude at the park, not just a few selected people. Nudity’s not required, though, unless

you use the pool or hot tub. Nobody stares at anyone; doing that is rude. There's absolutely no public sexual or suggestive behavior allowed because that would get the person tossed out permanently."

Andrew interrupted, "In the Naked in School Program that's supposed to start at our school, they'll be forcing kids to allow touching and groping, doing all kinds of sexual stuff, and making kids wank in front of everyone. That's just horrid. Nothing like that happens at camp. Everybody is lovely and they look after the kids to make sure everyone is safe."

"So if I go," I said hesitantly, "I wouldn't be forced to get starkers?"

"No, never," Andrew said. "Last year a girl came, she was 16, I think, and she always wore her cozzie around the camp. She took it off to swim, but showered in private, wrapped a towel around her till she got to the pool, and slipped out of the towel into the water. After a week, I guess she saw that doing that was just silly; she was making a spectacle of herself and she saw that her modesty was attracting attention, so she dropped doing the whole hiding-herself-with-her-towel act and stopped wearing her cozzie too. She told me after that, that being the only one wearing a cozzie was more humiliating than her being starkers."

"Oh. Ohhh..." was all I could think to say. My mind was whirling. *Could I do this?* The girls responded to my unspoken question. Or had I actually spoken it aloud? Maybe. Probably. Ugh.

"Sure! You can do it! There's lots of teen girls all starkers!" Abi.

"I got all modest when my boobies came in! But it was okay!" Sam.

"Nobody stares! Everyone's starkers, it's so fun!" Abi.

"When you're starkers, the air and sun on you is ace!" Sam.

"There's so much to do, you'll forget you don't have clothes." Abi.

"Everyone's equal. Nobody looks rich or poor. All the same." Sam.

I had a terrible time keeping track of what they were saying because it all came at once again. Apparently the parents could follow them; they had years of experience, obviously.

I tried again. "What about the pictures that get on the Web? Nobody cares about that?"

Gerry shook her head. "No pictures. No cameras. No mobiles. If you're seen with a camera or doing anything like taking a photo with a mobile, you'll get kicked out and the thing's memory gets wiped. Everyone watches to make sure that rule is followed."

"So it's safe?" I wondered.

"Safer than anywhere in the textile world," Andrew remarked.

"What's textile?"

"Erm... It means like in cloth," he answered. "Those who wear cloth. 'Textiles' is what we call non-nudists. So will you go with us? It would be blindin' amazing."

"Well... Okay. But promise you'll protect me," I pleaded, taking his hand.

He squeezed it and nodded at me, smiling widely, as the girls squealed (ouch, my ears) and began hopping around, then they came over to hug me, whilst Stuart and Gerry beamed at us.

"We'll need to get permission for you," Gerry said as she too came over to give me a little hug. "Is Scott well enough to sign a parental consent form? They are very strict about having that."

“Sure. He’s signed other things whilst I was there visiting.”

“I’ll get a form for him to sign then. I think I can get it from the resort’s site,” she said.

Meanwhile the girls were grabbing my hands, pulling me away. They wanted to tell me all about what we would be doing at the camp. In stereo. Andrew looked at me and rolled his eyes. I mouthed back to him, “Sorry.”

Hey, I would get to spend my birthday at the resort in my birthday suit. Just how brill is that?

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The resort was only about 40 minutes away and the trip went quickly. Fortunately their seatbelts kept Sam and Abi from bouncing out of our SUV; they were fidgeting so much on the drive, but those belts sure got a workout. I had to restrain myself mightily when I found myself beginning to calculate the required tensile strength of the nylon webbing of the belts necessary to... Anyway. Okay, Emma, just stop it.

How much do you pack for a stay for a month at a resort? If it’s a nudist resort? Not much, it seems. We did have some special things to take—for example, the resort had a monthly theme night and people dressed up for that theme. Nudists love to dress up. Who knew? Weird, right?

This year August’s theme night was “Your High School Prom.” Huh. I never had one. Did my school have proms? I guess I never noticed! So the girls found a remnant of a gauzy fabric and organized a “prom dress” using it. I thought it was more like a sari and it would hide virtually nothing on me, but they insisted that it would be perfect.

Of course nobody needed bathers for swimming. I only have two cozzies; I idly wondered if they would still fit so I checked them out, just for yucks. Ugh, the one-piece I used to wear to swim in the uni’s pool was all faded and stretched out now. Into the bin with that one. And my two-piece cozzie? Hmmm, I last wore it, well, it was early last year. When I was 12. It looked so juvenile now. When I tried it on, I could barely get the stupid thing over my hips—and the top? Wait a second here. No way will this fit!

Now I started really looking at my body. *Really* looking—I went over to the mirror on the back of the door. Jeez, will you look at that. I hadn’t been paying much attention, but damn, my boobies have grown some; no wonder that top didn’t fit anymore. I turned sideways and checked the mirror. Crikey, not bad. My nipples are puffy and popped out and there’s a nice amount of padding of flesh under them, yep, there may even be enough here for an “A” cup. I have a small body and small chest so they kinda look bigger than they really are, I guess. Awesome... damned if they don’t have a really nice shape too. But, crikey, they’re so firm that I don’t need any support at all.

Just how much have I grown, anyway? I found a pencil and using a book as a square, I stood against the door frame and marked my head. Oops, I’m wearing sandals. Marked my head again. I found Stuart and he loaned me a tape measure. Blimey! Five feet one inch... no, one and a half (don’t laugh, those halves count too! A half inch is a whole one and a quarter centimeters, you know. Every centimeter is important!). Shit, I grew two whole inches in the year. There’s hope for me yet. Maybe the cold weather in Alaska had stunted my growth and now my body’s finally got itself unfrozen. Yep, Emma’s come in from the cold. Woah, hell, I’m chuffed with how I’m starting to grow finally.

And back in the spring, I had noticed that I’d begun growing some light brown curly hair on my mons; looking down there now, my hair’s denser and it mostly hides the skin underneath. I had already begun to shave the hair growing in my pits. My periods had started back in the late spring. Puberty, here I am! Ready for the world. I hope the world is ready for me because I wanna *DO THINGS!*

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Back to the present; it's Saturday morning and we're at the resort's gate. Stuart drove through the gate and we're inside the park. Oh, blimey, I'm scared!

Then I heard Andrew chuckle. "Emma, it's okay to open your eyes now..."

"Can I? It's not rude to look?"

Sam laughed. "Hey, you need to see where you're going, Emma. You can look all you want. Just don't stare."



*Emma sees a frisbee game in progress and is thunderstruck at the sight of all the flopping penises*

I looked... and looked some more... ohmygod, there are naked people everywhere! Where do I look so it's not obvious that I'm *looking*? How long a look is a proper look before it turns into an unacceptable look? Does the rudeness of a stare depend on the sex of the person that I'm staring at? Are there any rudeness-prevention graphs that plot the acceptable looking times of the looker versus the sex of the lookee? *Cut it*

*out*, Emma. Get a hold.

Stuart and all the girls went into the office to check in. This year, Gerry had told me, they weren't renting a camper trailer, they had organized a cabin. More room, she said. I was stood outside with Andrew whilst he was pointing out some of the resort's features to me. Yeah, I was looking at certain *other* features. Just looking, I told myself. I was... no, I wasn't staring... I think...

"Emma, close your mouth. And stop staring..." he chuckled.

Damn.

Crikey, intellectually you know that you're gonna see naked people at a nudist resort, but the reality is, well, like a smack upside the conk. Damn, can't help but look at those sights... boobies bobbing, arses jiggling, and goddamn, the blokes! I guess the internet doesn't prepare you for seeing a real live penis for the very first time. And so many of them, and they're all so different! Crikey! Who knew? How can they walk around with all that... stuff... just hanging right out there, swinging around? Doesn't it hurt? Or get in the way? Ugh, seems like it'd be awfully uncomfortable, all that... erm... flopping around... especially whilst running... but look over there, those blokes are playing volleyball and... jumping? Diving? Blimey... Don't wanna think about it... Sigh... I think I'm getting overwhelmed...

Stuart and Gerry reappeared with the girls in tow. They were hopping around Gerry, begging to get

starkers, *right now*.

“Hold on, hold on. You need to help getting the car unloaded and then help Emma get used to all this, okay? She’s looking a bit...” she peered at me, “overwhelmed.”

They both giggled. Now *that* they could handle. They immediately determined that I would be their acclimatization project, so they agreed handily, “Great idea, Mum.” In stereo.

I swear, despite their age difference, they behaved just like twins. It was almost like they knew what each other was thinking. They completed each other’s sentences and if you asked either of them a general question they both responded in harmony, like a Greek chorus. So funny.

We found our cabin and took in our bags. This cabin was a new addition to the park and had two bedrooms and a sitting room which had a small kitchenette in the corner. A loo was off of the sitting room and it had a small stall shower.

One bedroom had a queen bed. The other was a little larger and had a queen bed and a two-level bunk bed.

Once we were settled and had put our (small amount of) clothing away and filled the pantry, fridge, and freezer with the supplies we had brought, Gerry and Stuart got the four of us together.

“We need to lay down the sleeping arrangement rules,” Gerry said. “Emma isn’t used to nudity, obviously, and certainly not used to nude people being so close to each other. Andrew, I know that you and the girls sometimes fall asleep cuddling together in the same bed and that you kids also ... well... okay. We trust you kids not to do anything against the rules we set. But I don’t know how Emma feels about seeing you cuddling the way you do.”

Gerry looked at me. “Will you be okay with my kids cuddling together?”

“Erm? They’re cuddling, like... starkers, together?” I looked at Andrew and he nodded. “Oh. Ohhh...” I whispered.

My mind whirled again. The little ball whipped around it, bounced a bit between the black and red pockets and then plonked right into the single green one as the whirling slowed down and stopped. I had bet green so... A 35-to-1 odds jackpot! So I went for it all. (Just so you know: the roulette wheel was invented by Blaise Pascal. Yep, of course he was a physicist. Just sayin’.)

“You said nudist places aren’t about sex. I can see that you all love each other very much and I know that love and sex can be different things. That’s what I’ve read on the Web. Can’t trust everything on the Web but I feel that part is right. If Andrew and the girls like to cuddle, that’s ace. Erm... would I mind it? No, I wouldn’t. Erm... but would anyone mind if... if... I got some cuddling too? I’m not interested in having sex—the rot that the Program kids had to do in a video I saw was horrid. But getting a little cuddling myself would be brill.”

I was starting to tear up.

Gerry came over and took me in her arms. “You poor thing; you’re love starved. You’ve got all that intelligence but you’ve bottled your emotions up inside you, haven’t you. This must be overwhelming for you, dear, isn’t it.”

My tears were falling now. “Yes. Yes it is. Sam and Abi have become like sisters to me and I can’t get enough of them. Their exuberance is amazing. And Andrew is brilliant—both as in ‘brill’ but he’s also smart. He’s special to me now as well.”

Now it turned into a group hug, with everyone trying for priority.

“Okay, kids. Let’s get back to where we were,” Stuart said. “Emma, you’re okay with the casual display of affection the kids have for each other, then?”

I nodded. “Yes. Very okay.”

“Hmm... Gerry, what do you say... let the kids choose their sleeping arrangements?”

I thought: *wow and double wow. How many other parents would be like this?*

Gerry nodded. “Okay then. You know the intimacy rules we set when we first discovered you all in bed together doing your naked cuddles... and... the other things. Same rules apply; tell them to Emma, and Emma is included as much as she is willing.”

Wow again. Triple? Then I got a sudden shock, like a jolt of reality just hit me. When I had agreed to go to the resort with them, I intuitively knew that I’d be seeing Andrew’s naked body whilst there, but that was just an abstract thought and I had never had any experience even remotely similar. The idea of my being starkers together with a boy had never even made it into my conscious thoughts—even back in Fairbanks, I knew that I wasn’t going to be prancing about starkers in school. Now my being starkers in public was about to become a reality—and—Andrew’ll be starkers too—and—ohmygod, perhaps later Andrew’s naked body’ll be close to mine, his naked skin even touching mine. *Suddenly I’m feeling lightheaded. I think I’m gonna faint.*

Gerry spoke again. “Dad and I are going back to our room to get ready to go out. You kids get ready too. Don’t forget the sunscreen and the towels!”

Ulp... moment of truth. *What do I do...?*

Andrew made a little throat-clearing sound. I looked up.

“Erm... I could go in the loo and get ready...” he began.

“...and Sam and I can go in the outer room,” Abi spoke for the two of them as Sam nodded.

I gulped. Bite the bullet. Was this how I would have felt if I had actually been forced to strip off on that far-away day in that notorious Room A103A? No, this situation didn’t have that feeling at all. All I felt from the others were love, concern, and something else. That’s crazy, it felt like impatience ... as in, “let’s get the bloomin’ show on the road.”

“Erm... no, I’m okay... I think. Let’s all stay here.”

*Ohmygod. Did I really say that?* I must have because we all stayed.

Bloody damn, I’ve never seen anything done so fast in my life. The girls’ clothes were gone in one eye blink. Every frikkin’ article. Whipped off. Gone. Seriously. Superheroes couldn’t have done it faster.

Wow, the girls were blindin’ *CUTE!* Abi was like a pixie. Not flat, her body lines weren’t straight like a prepubescent. She had begun to get that hourglass shape that comes with puberty. Her boobies were small but perky—little cones—and between her legs sat the cutest little puffy mound with a dusting of faint hairs.

And Sam? What a doll. She had—maybe small “B” cup boobies, I’m guessing, but there was more than enough to fill the cup in the bra she had whipped off. She had a sleek, curvy shape and the curly hair on her mons matched her dark blond hair.

Both girls were jiggling with impatience now. It was fascinating to see how that affected Sam’s boobies.

All that had happened in about two seconds and then I noticed that Andrew now had his shirt off.

Apparently he had missed out on the speed gene. Or he was being polite. Yeah, maybe that. Hey, I was behind now—if I wait, then I become the spectacle. I don't fancy that. So I pulled off my top and slipped my shorts off my hips, where they puddled on the floor. Now I was stood there, just wearing knickers. I don't wear a bra; my boobies don't need any support, although if my nips keep poking out the way they're starting to... Damn. Taking a deep breath, I slid my knickers down and off.

Then I nervously stood up and looked over toward Andrew. He was completely starkers now and had been watching me undress and... and... oh god, his penis was growing, pointing out from his groin, straight at me... no, it was still rising... now it's pointing at the ceiling... blimey, it's huge!

"Oh shit," he said, covering that incredible, gorgeous thing with his hands. "Sorry. Oh god, I'm sorry."

I was captivated. That was the most beautiful, glorious thing I had ever seen.

"No, that's okay," I choked out. "It looks... wow... erm... just splendid."

"That's not supposed to happen," he groaned.

"Yeah, Andrew's never..." Sam.

"...gotten a boner before..." Abi.

"...with just seeing us. Or with..." Sam.

"...any other girls. You're special." Abi.

Damn. They're doin' it again—finishing what each other says.

"Let me see it," I implored. "I'm gaggin' to see... it's gorgeous... Come on, Andrew..."

"Please, no," he moaned.

Sam went to him and pulled his hands away.

"Isn't Andrew's cock a blindin' stunning one?" she asked me, turning his hips so that I could see it in stunning profile. "It's much bigger than last year. It's gotta be more than six inches now, bro, I'm guessing. You always did a crackin' good job of controlling it around all the foxy gals here. You never popped one like that before, just from seeing a pretty girl."

He sighed again. "Emma...you're not just pretty... ohmygod, Emma, you're the most... you glow... like a goddess..."

Was there another Emma in the room? Looked, nope, didn't see one. *Who's he talking about?*

I guess my face said I didn't believe him. Abi came over to me and took my chin and raised my face to look into her eyes. I was blushing; I could feel the temperature difference between her hand and my face.

"Emma," she said quietly. "You're spectacular. I can see why bro sprung a hard one for you."

"What? How? I don't have any figure; I'm almost flat and skinny too."

Sam smiled at me. "Is that what you think? Well, we learned that one of the best parts of nudism is that it helps you build a good body self-image and get comfortable with how you look to others. We can see that you don't know how your body really looks—you think 'cause you feel the same inside, that your body hasn't changed either. You must still think you're like a pre-teen. No way. You have the face of an angel. Your eyes always sparkle and your mouth always has this tiny grin like you're seeing something no one else sees and you're enjoying that thought. You seem to glow from inside and your face shows it. Don't frown at me. Can you smile?"

I pouted.

Sam glanced at her sidekick. “Abi, do something... outrageous.”

Abi snickered, then raised her hands to her imaginary huge hooters and jiggled them, wiggling her hips and sticking her tongue out at me.

I couldn’t help it; that was pretty funny and I laughed.

“See!” Sam crowed. “Your whole face lights up when you laugh. You just sparkle. Now let’s see. You don’t think much of your body, you say. But your titties are just right, very cute, the perfect size for your chest and your nipples stick out like cute little puffy buds.

“Your waist flares out to your hips like... like almost a Barbie doll, but you aren’t that skinny. Your legs are long and sleek; that must be from your running, yes?”

I nodded, still in shock.

“Yeah. Runner’s legs. And your fanny is so cute; it’s puffy like a little peach and covered with tight curly hair—looks so soft. Your butt is a perfect bubble. You’re the whole package, and the proof is bro’s reaction. No one else has ever made him pop a hard one like you did.”

I shook my head. Unbelievable. Suddenly Stuart and Gerry came in. They were starkers, carrying towels.

“Aren’t you kids ready ye...” Stuart began and glanced at me. And turned red. “Holy fu...”

Gerry looked at me and gasped.

“What? What! Did I do something?” I nearly panicked.

Gerry took my hands. “Emma. You’re... I don’t know. Incredible. Gorgeous. Words fail.”

“See?” the girls chorused gleefully.

Gerry laughed. “Look. Andrew has a bit of a situation there, dear. Looks like Emma has the same effect on him as you, dear, but it really shows on him.”

Andrew’s face was so red now that I thought his hair would shoot up in flames.

“Sorry, Dad,” he muttered. “She’s so brilliant.”

“I agree, but you can’t go out like that, can you.”

“I know. I gotta... oh damn.”

“Need to relieve it?” Stuart asked.

Oops. Relief. That friggin’ stupid Program video I had seen flashed into my mind. Sometimes I hate having such a retentive memory. Now I have images of wanking boys taking relief floating in my mind’s eye. Using Andrew’s long, stiff, gorgeous penis. *Stop! Go ‘way!*

“Uuuh. Let me try to get some mental control, Dad.”

*I need some of that myself, actually,* I told myself sternly.

Gerry was looking at me searchingly.

“Emma, there’s something really different about you now,” she mused. “No, I don’t mean your being nude,” she giggled. “It’s about your... aura?”

I shrugged, confused. “What do you mean?”

“I took a teaching degree in uni and when I did my student teaching rotas, I saw these pupils. They were like chameleons. They blended into their surroundings and became invisible. That was you, wasn’t it. You were like that, weren’t you. You still are that way somewhat, actually.”

“Yes, miss, I did do that.”

Wow, she had switched from a mum into a teaching mistress persona so fast and I just automatically responded to her like a trained pupil.

Gerry continued, “Before now, I saw you as an ordinary looking, pretty teen girl with nice, fairly cute features. But when you shed your clothes, you obviously shed your social camouflage with them. Darling, look at you. Your personality has flowered in here now. You’ve turned into a sparkling, vivacious young woman. See the effect on my men,” she laughed and pointed.

Whilst Gerry had been speaking to me, Stuart and Andrew had been staring at me, almost glassy-eyed. Andrew was still kinda rigid down there, but Stuart... wooo, nice. He’d thickened a fair bit too. Awesome...

I shot them a look, plonked my fists on my hips, and chided them, “You *said* nobody stares!”

It was hysterical. They both shook themselves like wet puppies and looked down in embarrassment.

“Sorry...” Andrew said.

“Pardon...” Stuart said.

Gerry laughed. “See how the guys responded to you, Emma? Stuart? You too? Now really! Okay now, that’s enough. Kids, put on some sun lotion. We put some tubes on your night stands. And Andrew, try to get that controlled. Stuart? Jeez.”

I got a tube and started spreading the goo on my body. They thought that this old body looks that good? Amazing. Who knew? I just don’t know how to react to that idea.

Gerry broke into my thoughts. “Be sure to do the parts that don’t see the sun. Do your boobs and naughty bits. Sam, you catch Emma’s back. Then she can do yours. Abi and Andrew can help each other.” She chuckled. “Can’t have Andrew doing Emma...”

“Muuu...mmm...” Andrew whinged.

We finished and Sam handed a large towel to me. She picked up a bag, saying, “More sun lotion, tissues, and other things we might need at the pool,” she told me. “Grab your sunglasses.” Then in a soft voice, she added, “A secret. We had you get those ‘cause they’re nice and dark. That way you can stare with no one noticing.” She giggled. “Unfortunately everyone knows that secret, so if you *do* stare, don’t be blatant.”

In the outer room, the adults had filled a cooler with bottles of water to take.

Stuart glanced at Andrew. “Son, you still have a bit of a chubby going there. Must be a touch of pent-up demand, not seeing naked girls for a while,” he chuckled. “How about the girls go ahead to the pool and Andrew, Mum and I will stop at some of the regulars for just a bit.”

Sam and Abi each grabbed one of my hands and just about pulled me out of the cabin, giggling and chattering about how brill it is that you’re here and we’re gonna go to the pool now and you’ll get to see what that’s like and we can lay out and get tans and have all kinds of fun now and we can’t wait to see our friends and on and on... You get the picture. They were excited.

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The girls had shown me how to tie up my towel with a kind of tuck between my boobies so it hung around my body like a shoulderless strapless dress. On the way to the pool, they waved to a number of people who shouted back greetings. When we got to the pool deck, the girls told me that we needed to shower; the showers were on the side of a little concrete block building where the loo was also located. *The showers are outside? Blimey, what's that about?* Other people were showering there—both men and women were showering together, but nobody paid us a bit of attention as we got soaped up and rinsed off. That was a challenging experience, though. *Isn't showering a private, single-sex thing?* I thought it was. Not here, though. Men and women washing their naughty bits—outside too, where everyone could see? My head was spinning.

When we finished and walked around the side of the bath house, I saw about eight girls were stood near the pool's shallow end; their ages ranged from about eleven to sixteen, I guessed. Wow, the screeches that the girls let out when they saw Sam and Abi coming attracted lots of attention. Everyone around the pool looked, and then laughed at the spectacle of a gaggle of teens and preteens jumping up and down and hugging each other. They were all starkers and just cavorting around with no care in the world. Amazing.

Abi had already shed her towel onto a chair and was talking to three other girls. I followed Sam's lead and carefully spread my own towel on a vacant lounge chair, then stood back up to be introduced to the girls who were talking to Sam. *Eeep. Now I'm bloody naked outside, in public. No, not naked, nude. Andrew told me that there's really a difference. There is? Who knew? Why don't they just use "starkers"? Means the same. Or maybe not.*

There were five girls excitedly talking to Sam and me, but I had somehow fallen into my analytical mode again—looking at the girls hopping around—where does all that energy come from? These girls were so much more animated than the groups of girls I had watched interacting back in Fairbanks, with an orders of magnitude greater display of happy bouncing and jiggling going on here.

So I formulated some possible theories. One. Must be the higher temps. Of course—that makes total sense. After all, molecular motion increases as the temps go up 'cause the molecules absorb more energy and can move faster. That's what Amontons's Law describes, and these girls are certainly supercharged with energy. Theory two. Fairbanks girls need to wear tons of clothes, adding to their mass, whilst these girls are naked—oops, nude. Therefore, nude girls carry less mass. Less massive objects can change direction faster than more massive ones, therefore they can jiggle faster. That's what Newton's First Law says. No, not about nude girls, about inertia. And speaking of jiggling, certain body parts of the girls were doing that jiggling quite nicely, thank you.

Damn, I'm doing it again. Every single bloody thing I see, I turn into an exercise in physics.

Looking at the group, I had guessed they were all my age or a bit older, based on how much their bodies had developed. Silly me. The girl whom I thought was fifteen or sixteen was actually thirteen and the youngest-looking girl was sixteen. Shame on me for coming to conclusions that weren't based on fact.

Whilst I was being introduced and trying to cement each girl's name into my memory, one of them, Sherrill, hissed to me, "Emma! Tone it down! Chill out!"

"Huh? What am I doing?" I asked, suddenly realizing I was starkers in the open and tried to fight off the desire to look for my towel to cover my body... *where was that bloody towel?*

Another girl, Wilma, I think, responded, "Sherrill's right. You're, um, like glowing or something. You're kinda radiating this super-shining feeling. Everyone's looking over here at us. You look, well,

amazing, and it's like, I don't know, sorta like a magnet. You need to tone it down."

Gerry had arrived with Stuart and she was walking over to us now. She had overheard Wilma talking to me.

"Wilma's right, Sherrill. It looks like Emma has a kind of charisma that makes her stand out in a crowd. Sherrill, she really can't turn that off; that's her personality that glows like that. Emma, it looks like nudism has unlocked something inside you, dear. It really looks good on you. Okay, my three gals... I just wanted to tell my three girls here, Emma and my two ladies, that you should charge your lunches to our resort account. Charge what you get from the snack bar too. Okay?"

Abi and Sam chorused, "Yes, Mum!"

Then Andrew came onto the pool deck along with five other boys, carrying their towels in hand or tossed over a shoulder. After guessing the girls' ages wrong, I wasn't gonna try guessing the boys' ages now, but blimey, I couldn't make my eyes stay up on their faces... now I knew exactly why dangling bits are called "dangling bits." What a wicked awesome sight. I never knew that penises could be so bloody fascinating. The boys were chatting as they came toward us, penises swinging gently side to side as they walked. That was mesmerizing to see, so blinkin' ace to watch; I felt my face break out into a wide smile as I took in that wonderful sight. This being starkers was actually *such FUN!* I did this little hoppy jigging dance myself, couldn't help it.



*Emma can't get over her fascination with penises. Here's more to look at*

That's when several of the boys glanced at me, did a double take, then stopped and began some outright gawking and I saw some interesting stirring happening down in their dangling bits, which instantly stopped dangling when they suddenly began to ... *crikey, jeez ... ohmygod... wow... lookee that...*

That's when several of the boys glanced at me, did a double take, then stopped and began some outright gawking and I saw some interesting stirring happening down in their dangling bits, which instantly stopped dangling when they suddenly began to ... *crikey, jeez ... ohmygod... wow... lookee that...*

"Shit!" ... "Oh hell!" ... "Goddamn!"

Cursing, three of them dropped their towels on the deck and plunged into the pool whilst a fourth turned away, took the towel he was carrying, and hurriedly wrapped it around his waist.

Andrew came over to me, chuckling, and gave me a little side hug.

"See. I'm not the only boy you affect like that," he whispered in my ear.

"Andrew, please! Yeah," I glanced down, "ohmygod, look, you have a... chubby? Oh my, ha ha. You're getting one again, too."

He sighed and moved his towel to cover himself. Such a shame... "Emma. Please take pity."

The other girls had obviously noticed the boys' discomfort and began laughing at them; then, one after another, they hopped into the water to join the boys. Me? I sat on the edge and just slid into the pool. Andrew copied me, still trying to hide his thickening, which was developing quite nicely. I just loved that.

Ohmygod! The water moving against my bare skin felt incredible.

"Feels ace, right?" Andrew asked.

"Sure does."

"Good. Let's go join the others."

They were all in the middle-depth area of the pool. It was actually shoulder deep for me so I breast-stroke-sloshed-walked the ten feet over to the others. The girls were still teasing the boys about how rude they were, popping those boners and all that. But all the teasing was good-natured and it looked like the kids liked each other. Andrew introduced me to his friends. They were all fourteen and fifteen years old, but the physical differences between them were just fascinating. And I had noticed some *really* fascinating differences between the various penises I saw, particularly their erect ones. I'll need to ask someone—Andrew? No one else to ask, really. Then Andrew, along with a couple of girls and two boys, went over to the pool's side in the shallow end where the water was waist deep and there was a little underwater ledge to sit on. I went along with them, whilst lost in thought, and sat.

Yet again my mind had drifted back to the Program and what it was supposed to accomplish with teenaged kids. I was actually enjoying this experience tremendously and it was completely changing my opinion about public nudity. Now, introducing nudity to teenagers suddenly didn't seem all that bad to me, but all those blinkin' sexual trappings that came with the Program were still horrid. *Oops. Someone's talking to me. It's ... yeah, Stan.* He was stood right in front of where I was sat on the ledge.

"Emma? Emma, you have the cutest accent. Like Andrew. England, right? Not Australia."

"Yeah, England," I responded and my gaze dropped.

It was shallow here and the water was totally clear. His waist was almost at my eye level, so I could see... oh my, look. Blindin' incredible. Fascinating how rigid it looks, sticking straight out, and how it curves up, so smooth... Nothing like when it was soft... Stan saw where I was looking and blushed, then covered his bits with his hands.

"Oh god. Sorry, can't help it. It has a mind of its own. You're so pretty... more than pretty, you just glow, Emma. Andrew said you're staying with him and his sisters. He's one lucky guy."

The other kids had moved over to us now and we got drawn into more chatting and then someone called, "Hey... let's have a volleyball game!"

One part of the pool had a volleyball net stretched across it and the pool's sides formed the court. We all sloshed over to that area and someone organized a ball. Then the game began. It wasn't a real game; we just volleyed the ball back and forth without keeping score, but the antics of some of the kids were epic, like dives to reach the ball with the resulting waves swamping everyone within ten feet, or leaps to spike the ball which were followed by even more flops and huge splashes. When the ball bounced out of the pool, one or another of the boys would hop out to retrieve it and I loved watching them run away (wicked awesome arses flexing) and back (wicked awesome penises flopping). *Oh jeez. Am I a pervert? No, probably just sexually repressed or something.* But I'm fixating on what I see way too much, I'm sure.

## Chapter 9

The rest of the day was spent just hanging out with the other kids. We had split into separate groups of four or five kids but no one spent all the time in a single group. There was a lot of switching around, so I got to know everyone. Of course I had to tell my stories to everyone, both stories, my Program-not-happening story and my get-a-physics-degree story. I edited both stories heavily for the whole group. Some things needed to be shared only with close friends.

Just before dinner, whilst we were washing up in the cabin, I decided to ask Andrew just why “naked” and “nude” were different.

“After all, aren’t they essentially the same thing?” I wondered.

“Nope, it’s like a point of view issue,” he explained. “Let’s see; the best way is... erm... yeah, I saw a quotation that explains it but I need to find it so I get it right.”

He got his mobile out of a drawer and began working it.

“Ah. Here; I remembered.”

He showed me the screen. On it, I read,

Nakedness reveals itself. Nudity is placed on display. ... The nude is condemned to never being naked. Nudity is a form of dress. (From *Ways of Seeing* by John Berger)

“Who’s John Berger?” I asked.

He scrolled the window and pointed. “He did a BBC program in the 1970s and then he wrote this book. He was an art critic. You see the difference now? Nakedness implies vulnerability, exposure, even exploitation. Nudity is a state of being; it has the sense of security and propriety. And art emulates life, doesn’t it.”

“Crikey, Andrew, you’re good in maths and you’re a philosopher too. You’re so smart...”

I caressed his arm. Then his folks called, “Kids, ready? Dinner.”

We ate dinner as a family at the on-site restaurant. It was weird eating a normal meal whilst wearing no clothing in a kind-of normal dining room (the non-normal part was that the servers were topless and the diners nude). Really weird, okay, surreal, actually. It had been a busy day for us kids, so while the parents decided to go to the clubhouse for the poker game night that was scheduled for that evening, we decided to just stay in the cabin and rest. We all wound up lying on the queen bed in our bedroom, watching a movie on my tablet computer. All four of us did fit, nice and snugly, and let me just say, the feeling of Andrew’s skin against mine was simply stunning. He lay on one side of me and Abi was snuggled against me on the other.

Abi was lying with her head on my shoulder whilst one of her legs was thrown over mine. She had been holding the tablet on her tummy and was commenting about the movie but eventually lost interest in it. She handed the tablet off to me and Andrew took it. Then I felt her relax. The next minute, her breathing turned into a light sighing; she had fallen asleep. I glanced over at Sam; she had fallen asleep too. I gently disengaged Abi and turned slightly toward Andrew, who had been darting glances my way every so often. Now he was looking at me, eyes shining with admiration.

I looked back at him; suddenly I became aware that his glances at my body had created an almost tangible sensation, like my skin was being caressed by his eyes, and began to feel an intense, coiling itch of arousal in my belly.

“They’re asleep,” I murmured, my throat swollen with ... love? desire? With an effort, I tried to relax.

“Yeah. This movie isn’t so great.”

“Mmm hmm. Let’s ditch it.”

He put the tablet on the night stand and lay back again. “Did you have a good first day, being nude and all?”

I sighed. “Awesome. It was brill.”

“Did anything bother you? Anything unexpected?” he asked.

“Erm... nothing bothered me, but... well, just about everything was unexpected.”

“How so?”

I giggled. “I kept thinking of how different it would have been for me if I had been forced to do the Program back in Fairbanks. I guess I would have gotten to see some kids all starkers—and seeing guys’ penises back then too, and having to do all those horrid sex things as well, and was feeling good that none of that rubbish ever happened to me. But then when I saw everyone’s penises here...”

“Emma, we kids call them dicks, or cocks, you know.”

“Yeah, I guess. You’re the first boy I ever really talked to about anything other than schoolwork cobbles. Actually you’re the first boy I’ve ever spoken to about something that’s not schoolwork. And as well, you’re the very first boy I’ve seen all bollock naked. But I need to ask someone... all those boys’ pretty... erm, cocks... they’re so brill... am I perverted if I love to watch boys’ ... cocks?”

*Shazam. Instant erection over there. Gotta do a paper on that; I’m sure it’s the first instance of faster-than-light action ever observed.*

Andrew groaned and made like he was going to cover up.

“No, don’t. It’s gorgeous. I was gaggin’ to see yours hard again all day. Actually I like how they look, both hard and soft. And some have... a covering... like a sock... over the head? What’s that all about?”

“Those ‘socks’ are foreskins,” he groaned as he saw me staring at my object of fascination. “Have you heard the term?”

“Oh yes. But I had pictured them just as a bit of skin on the head; nothing like I saw. Some I saw even had skin dangling over the end.”

Andrew nodded. “I obviously don’t have one and Dad doesn’t either; that’s called being ‘cut.’ But foreskins come in all sizes and different shapes, just like cocks do.”

“Oh yes, I could see that, even when they’re hard. Stan’s sticks straight out but curves up in an arc and has a spheroid head; it looks kinda bulbous, like a mushroom. Davy’s goes out straight from his groin, parallel to the ground, and the head’s paraboloid-shaped—erm... like Darth Vader’s helmet. Tim’s was skinny, stuck straight out but bent downward near the head, which was kinda pointy; it had a conical shape. Yours stays straight but points upward at 45, maybe 60 degrees, has a nice ovoid head, and is the best looking, too, nice and thick, and it’s the largest—that is, of the four hard ones I’ve seen so far.”

He chuckled. “Always being observant and very mathematical too—I love your solid geometry take on blokes’ cockheads. Very Emma-like, even when you’re nude.”

“So I love to watch the boys,” I went back to that thought. “I like seeing their cocks and some of their arses are ... just awesome too. Some of the blokes’ arses are rounded at the bottom and some are square and look rock hard. Like yours does. When you’re walking... crikey, it’s brill watching you, the

way your muscles move. Boys' arses are so different to the gals who have rounder, almost heart-shaped butts but the gals' jiggle more when they walk and their hips sway in a very sinuous motion too. Isn't my loving to watch all that being a pervert?"

Andrew closed his eyes for a second and breathed deeply, then sighed.

"Shit, this conversation is killing me," he groaned. "Emma, the girls and I grew up as nudists so we're used to the nudity. But this is all so new for you so you're confused about how you feel. I'll tell you my secret—just like you—and also all my mates here, I like looking at the girls, even though I'm used to their nudity. I guess I like seeing their bodies—the nude body is blindin' brilliant and I love seeing it. So I don't think you're perverted if you like looking too. And you're the best of all of them; I just love looking at you."

He sighed again. "Emma... jeez... you're the loveliest girl I've ever seen. You have an awesome personality—it just glows—and you just... enthrall me. I love talking to you, looking at you, just being with you. I..."

He stopped when I leant over and kissed his lips lightly, just a touch. I couldn't help myself. His lips looked so tempting. Awesome... they were soft and warm... He looked at me, wide eyed.

"Andrew, I like you too. You're sweet and chivalrous too. And this snuggling is really brill."

Yes it was ... it was much better than just "really brill" ... it was enjoyable, comforting, pleasurable, and secure, to let my naked body snuggle against this attractive boy. As we lay there, looking searchingly into each other's eyes, he tentatively reached toward my boobie, begging permission with his expression. I took his hand and put it between my boobies and he began stroking them. Instantly my nipples responded by turning into rock-hard pebbles. And I felt each stroke over them send a flash of pleasure straight to my fanny. Nipples are connected to fannies? *Who knew?* I sighed.

"Yeah. This snuggling's fantastic. Are you okay, Emma? You sighed like..."

"Of course I sighed. I'm snuggling, naked in bed—erm, no, nude..."

"'Naked' works better than 'nude' right now, sweetie."

*Huh? Who knew?* I suppose, from what Andrew had told me earlier, the distinction would be important to an art critic. Or a nudist.

"Yeah, Andrew, I'm okay. I'm way better than okay. I'm with a boy I really like and he shows that he cares for me."

"Emma, I've never been this close with a girl... erm, who wasn't a sister, that is... I mean, I've never romantically kissed a girl. When you just kissed me then, I saw stars. I think kissing you again would be brilliant... erm... would you like that?"

"I think I would. I think that trying a bit more kissing would be *wicked* brilliant. Shall we try to test my hypothesis by doing a practical experiment?"

He laughed and shook his head at that comment.

We tentatively moved our faces toward each other until our lips touched and we gently rubbed them together for a few seconds. Andrew was the first to use his tongue; he licked my lower lip so I opened my mouth and let his tongue in. He tasted sweet, that must be from the pie that we had for dessert. Our hands continued to wander. Blimey, this felt blinding awesome. Then our kissing turned into an urgent snogging session, with both of us running our hands all over each other's bodies. It felt glorious. So did his hands as they caressed my boobies. Then I felt his hand fumbling around my groin as we kept

kissing. He cupped his hand over my mons and massaged it a bit, then slid a finger between my lips and touched my clittie and I felt a jolt of pleasure.

I put my arms around his back and pulled him around, almost on top of me, and now our bodies lay pressed against each other. I ran my hands over his arse and confirmed my hypothesis that his muscles were rock-hard. Blimey, his arse was to die for! I held his chest firmly against my hard nipples and felt his hard penis... no, cock, touch my leg, then it crushed in and a rigid wetness slid against my thigh. Huh, that feels good. I reached down to see what was wet—his cock was so stiff I could feel it throbbing as I took that stiff member into my hand. Ohgod... so awesome... Andrew huffed and pulled back.

“Emma, we can’t... I promised...”

“I want to see. In my biology class, that perving teacher tried to get me starkers for a Program class demo. Those thick-as-shit Yanks who started the Program think that making high-school teenagers do all those sex acts in school is just hunky-dory, so what harm could a little exploration do? Let’s just have a pretend Program class demo now. I need to see this wonderful thing of yours.”

He heaved a big sigh and then lay back; his cock was rigid and I could feel its pulsing in my hand.

“It’s so hot...” I whispered. “Soft, smooth, and hard, all at the same time,” I murmured wonderingly.

I noticed that the wetness was still oozing from his penis tip, so I touched it. Slippery stuff; this was what his cock had smeared on my thigh just before... Then I remembered, it was ... mmm ... yeah. Cowper’s fluid. *Right. The bulbourethral gland—Cowper’s—secretes the stuff to neutralize the acidity of residual urine in the urethra to protect the sperm in the ejaculate.* That’s what the biology text said. Stupid retentive memory. I must have been musing aloud again because Andrew let out a bark of a laugh.

“Shit, Emma, does that mind of yours ever stop going? ‘Bulbo...whatever’ gland? Cowper’s? This isn’t biology class... that’s called pre-cum. It’s slippery to help in fucking.”

“I know. It’s really ace.”

His penis... no, cock... was so hard that when I let it go, it smacked tightly against his belly and then I looked at where it joined his groin; there lay his testicles in their sack... the scrotum, I recalled. They looked... wonderful. I cupped my hand around them and they kind of pulled up toward his groin, no longer loose and dangly like I had seen on the boys when they arrived at the pool. Come to think of it, their scrotum (scrota? scrotums? Whatever...) looked a bit like this when we all got out of the water. As I was playing with the hard spheres, rolling them around under the skin of his scrotum, he grunted.

“Not too hard, Emma. They can be very sensitive.”

“I noticed that sometimes they’re tucked up close to your body, other times they hang down.”

“Yeah,” he grunted. “When I’m warm, they drop down. In the water they pull up.”

“Well, they’re kinda up now.”

“‘Cause you’re playing with them. If you keep doing that, I’ll shoot,” he panted.

“Really? Cor, that’s brill. Bloody awesome.”

I stroked his cock again and he grunted. Then as I continued to stroke him slowly, loving the feeling of the soft skin running over the hard core, he pulled my face to his and we began snogging again. A lot.

“Oh, Emma, I’m hurting here. I gotta do this...” and he grabbed his cock and began stroking it hard.

“Awesome,” I breathed. “Can I do that for you?”

He didn’t say anything but took my hand and holding it, he guided me in stroking him. My fingers didn’t even reach all the way around it, so I sat up straighter and used both of my hands. It didn’t take long until he grunted deeply and shot four great strings of pearly white ejaculate onto his chest and belly, followed by some smaller pulses and then some more semen slowly oozed out of the head onto my hand. What an absolutely stunning sight!

Some of his ejaculation had splashed on me too; it had gotten on my boobies and forearms.

“We need to clean up,” he sighed after he caught his breath, so we got out of bed and, holding hands, went to the loo, got some flannels wet, and cleaned each other off.

Then he waited whilst I washed myself a bit and brushed my teeth; he did his hygiene too, and we walked out into the outer room. He was looking a bit embarrassed so I took his hand and pulled him to face me.

“Andrew, don’t worry about it; what we did was brilliant. You know, frigging a teen boy is totally sanctioned by Yank society, right? Hello, naked Program. When you start school in the autumn, you’ll see. Public wanking. It’ll be a school requirement. It’s... oh, shit...hee hee...”

“What is it now?” he asked with a patient expression. “What new pearl of wisdom occurred to you?”

“Ha. Dumb language. I just realized I said something that means totally opposite things at the same time.”

“Oh, god, Emma. What now?”

“The word ‘sanction.’ It means complete opposites at the same time! A sanction is both an approval or a penalty for doing something. It’s funny.”

“Emma, that brain of yours never quits, does it. I think...”

He stopped because I pulled him to me, pulled his head down, and kissed him. Hard.

Then, “Andrew, I love what we just did in the bedroom. I love just being with you too. I don’t know if this can be something that will last; I hope it will, but I’m so attracted to you now and I think of you all the time.”

He smiled at me tentatively. “I feel the same way about you, Emma.”

We looked into each other’s eyes, then drew together and began another epic snogging session. That’s how his parents found us, stood nude there in the middle of the room, naked, embracing, and kissing fiercely. Did we stop? Nope.

Well, Andrew did stop long enough to mumble, “Hi, Dad, Mum,” and only then did we reluctantly finish the kiss. Then we separated, and holding hands, turned to the adults.

Gerry chuckled. “We figured you’d eventually get around to showing your affection for each other. But I hope you haven’t...”

“Mum, we’ll keep the promise. We were cuddling just before and telling each other how much we like each other. The most we’ve done is that Emma helped me wank a little while ago and, well, I think she’s really special.”

Crikey! What an open and trusting family this is!

“Well, remember the rules,” Stuart said. “No sexual intercourse and no inappropriate public behavior.”

And don't talk in public about what you two do in private together, either."

We both agreed.

"Where are the girls?" Gerry asked.

"Sleeping. They fell asleep whilst we were watching a boring movie. I was gonna wake them to brush their teeth and stuff," Andrew said.

Gerry nodded. "I'll fetch them."

Soon two adorable naked girls shuffled out of the bedroom, rubbing their eyes, and disappeared into the loo, and about ten minutes later, we were all cuddled up in the bed together with me pressed tightly against Andrew, spooning him.

"I love you, sweetheart," I breathed in his ear.

He echoed the words back to me, "I love you too," as I rubbed one hand over his cock, which sprung up again. He sighed, pulled my hand away, and when my next awareness came, it was the morning and Stuart was calling to us to wake up.

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"Kids! Wakey! We're off to the clubhouse for breakfast. Meet us there. Don't take all day."

As I woke, I felt Andrew's body spooning me and his erection was nestled firmly in the crease of my arse. I pushed back against him and wiggled and he groaned. As I threw the cover off us, the girls woke and saw Andrew's erection.

Sam laughed. "He's always that way in the morning, Emma. Isn't his dick just yummie?"

I chuckled. "It sure is."

Andrew sighed and climbed to his feet, shaking his head. And then I watched, astonished, as Abi went over to him, took his cock, and began wanking him. He tried to stop her but when she grabbed his testicles, he relented.

"We do this for him a lot here at the park," Abi said, grinning. "That way he can go out with us but also it's ace to see him squirt."

Andrew looked at me, concerned. "You don't mind?"

Now both girls were looking at me with worried expressions and Andrew's erection had flagged.

"Shit. We didn't think," Sam moaned. "We have this morning ritual when we're here. We do it 'cause he can't go out with a boner. Besides, we love him so much but we'd never go any further."

Who was I to deny their love? It was so apparent. I smiled.

"It's okay. And so that we have no secrets between us, I wanked him last night."

"Brilliant!" they both cheered and Abi got back to work.

I went over to Andrew and tentatively kissed him. I didn't fancy forcing him to endure my morning breath. Well, it didn't seem to faze him and his own mouth wasn't bad either. So there we were, happily snogging, with Andrew stroking my boobies whilst Abi was frigging him and Sam was giggling at the sight.

Andrew began groaning and then he pinched my nipples, sending a shiver of delight rushing through me. Crikey, that feeling went straight to my fanny again! And then he grunted and shot, over and over.

I think that I'll never tire of seeing that happen... it's ... so ... erm ... virile. Yes. Sexy too. Shit, blokes' cocks and um... balls... are so bloomin' fascinating. They swing side to side and bounce around when they walk; they puff up big, fat, and firm when they see me (*giggle*), and it's wicked brill how Andrew's cock swells up and points straight out and hard when it's played with. Blimey, what a shedload he let go. It went all over Abi and he hit me with a little too. And that's the best part—when he spurts out all that hot cream. Damn, this is only the second time that I've seen a cock do that and just watching it makes my fanny tingle.

The girls went to clean it up but then began some light-hearted whinging.

"Jeez, Andrew, you made a real mess this time. You got it all over me and Emma! And on yourself too, and look at the floor," Abi complained.

Sam laughed. "Oi. Look at that. You blokes all need showers."

Andrew caught his breath. "That was brill, Abi, Emma. Whew. Yeah, it's all over you two. Damn, there's not enough time for all of us to use the little shower in here. Let's go to the shower block at the pool."

So we did, and I experienced the glorious feeling of being washed by three pairs of hands. Oh, I helped out in washing the others, to be sure, but we had to finish quickly.

"We were wondering when you were getting here," Gerry said when we finally got to their table.

Sam giggled. "Took a shower together. Was fun."

Stuart snorted. "Okay, but keep it toned down. I'd like not to get kicked out of the resort."

After breakfast, we took a stroll; the siblings wanted to show me around the park. We hadn't done that yesterday since we had spent all day with the other kids. This resort was quite an operation, actually. There were some permanent cabins, but the sites were mostly filled with caravans—travel trailers, Andrew called them. Why do the Americans have to change the names of everything? He pointed to several other units which had a raised section at their fronts.

"Those are fifth wheelers," he said.

Not one of those things had five wheels. Yes, I looked; I counted too. Nope. Every one of them had an even number of wheels. The smallest number was eight. Hmm. The dim bulb who named them couldn't count?

In addition to the shower block at the pool, there were two other shower blocks near the caravan sites so people wouldn't have to go very far to get to the facilities. I had already been in the clubhouse and restaurant. There was a large sports pitch and on it there were several volleyball courts, a horseshoe pit, a tennis court, and four half-sized tennis courts (what are those? Answer: for pickleball). Huh. Really? Funny name. There also were four very long, straight lanes with a hard-packed gravel base and some racks of blue and green colored baseball-sized balls stood nearby to them. Andrew called them pee-tonk courts.

Hmmm... Pickleball. Peetonk. I guess nudists like sports with weird names. (Later I noticed an announcement on a flyer in the clubhouse for a pétanque tournament. Okay, pee-tonk. Probably French, maybe Provençal, something like "fixed feet," I guess; "tanquer" is French for "fixed together" and I remember "péd" means "feet" in Provençal; it's "pied" in French. One of my au pairs was from Provence and she would play with me, naming my body parts in her regional dialect. But still, pickleball?)

We also stopped to meet a number of people, regulars here, according to my guides, and these folks

lived on the grounds here most of the year and commuted to their jobs. Everyone was so friendly! I saw happy, smiling faces everywhere. Many of the kids we spent time with yesterday had to leave today; their holiday was over and they had to return home. A few of them only came weekends, arriving Friday afternoons and leaving on the Sunday. With the start of August, though, Andrew told me that a new crop of kids would be arriving any time now.

It was somewhat cooler today and mostly cloudy so we decided to skip the pool for now and Sam suggested going to the hot tub. I had never been, so I was okay to try it out—when I saw it, it was way bigger than a tub. Of course we needed showers before dunking. We were the only ones there and Andrew said that was unusual.

“The hot tub is way popular with the adults,” he told me. “Lots of times it’s full of people. We kids don’t try to use it then. It’s kind of an unwritten rule here,” he laughed.

I carefully lowered my foot onto the first step. Oooh! It’s hot! The sign said the water was at 102 degrees. Body heat is 97 to 98 degrees. Just five degrees higher and it feels this hot? Then I realized that the heat-sensing nerves at the skin’s surface are measuring a temperature closer to the surrounding air temperature, not the internal body... *Crikey. There I go, doin’ it again.*

So I sunk down to where my chin was at the water’s surface. Whoooo. It was momentarily almost painful, but then it felt like a hot, silky blanket was wrapped around me tightly—that’s when Andrew turned on the jets. Ohmygod. There was a nozzle right behind me and when it started, it almost pushed me off the seat! Wow, what an awesome sensation, the hot water pulsing against my body. It almost felt like I was being massaged. Andrew sat down beside me, put his arm around me, and drew me close to him. Sooo dreamy. The girls looked at us cuddling there and smiled; Sam made a thumb’s-up gesture. We spent two jet-pump timer cycles in the spa, twenty minutes by the clock that was nearby, and then Andrew said we had to get out.

“Spending too long in a spa is not smart,” he explained. “If your internal body temp gets too high, you can get heat exhaustion and that can lead to serious problems.”

I definitely could see that, especially for smaller people (yeah, like me). Then I chuckled a little and he looked at me quizzically.

“All right, Emma, what is it now?” he sighed.

“Nothing—a random thought. I was thinkin’ of the contrasts here, babe. Just a few months ago, I had to dress warmly to prevent hypothermia. Now you told me your heat exhaustion warning. I’m liking this problem much better.”

Andrew snorted. “Yah, I can see why you like this better.”

*Yes I do, I mused. Blimey, look at me, starkers. Emma’s really come in from the cold.*

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Whilst we were in the spa, the sun had begun to peek out just a bit and people had started drifting into the pool area. Some of the kids from yesterday popped in for a final splash before they needed to leave for home. Soon it was lunch time and we decided to tuck in at the snack bar; we could see the pool from there and the girls were waiting for some friends who they expected to arrive around lunch time. And right on schedule, about 12:15, four teen girls appeared at the pool gate, looking for their friends. Spotted us. Squeals!

And now there were six nude girls out there on the deck, happily doing their little hopping dance as they hugged each other and renewed their friendship. Andrew smiled at the scene. I think he liked the



*Emma watches the group of bouncing girls as Andrew approaches*

interesting jiggling display that their boobies were making ‘cause he had a huge smile...

Hmm. That boobie movement... it reminds me so much of colloidal motion, kind of like the way jelly moves but not as fast (Yanks call it “jell-o.” Stop changing things’ names! It’s confusing! Yes, jelly or jell-o is a colloid). I wonder if anyone has written an expression which describes the

phenomenon of boobie jiggling? It seems it might be an application of the Stokes-Liouville equation if we consider boobie tissue to be a kind of colloidal suspension of non-Brownian particles in a cellular matrix. The Stokes-Einstein relation probably would apply and...

*Blimey*, Emma, now *stop* doing that already!

Anyway, where was I? Yeah, Andrew was smiling... a big smile... the girls.... Erm... Oh, crikey, he’s right here now, talking to me...

“Emma? Emma? Are you in there? Hello? You’re staring at all those hopping girls. You know, staring’s not polite, even if you’re just formulating an equation to describe the motion of their titties whilst jiggling...” he snickered.

“What? What!” I jerked back to reality. “How’d you know what I was thinking?”

“Elementary, my dear Sherlock. Your eyes get this glazed look and that’s when the numbers start flying in your conk. I’ve seen it so many times now,” he chuckled. “And seeing where you were looking. Totally obvious, sweetheart.”

I went up on tippie-toes to give him a little kiss. “You’re so smart,” I allowed.

He smiled down at me. “I’ll let you go meet the girls’ friends. Don’t let on to them that you’re trying to reduce their body parts to mathematical equations, you hear? Shit, I shudder to think what equations you’ve come up with for all the blokes’ cocks you’ve been staring at. Bloody coefficients of expansion, Gaussian curvatures of cylinders, and who knows what else.”

Ouch! I tried to say something in response but he pressed his palm to my gob and all I could say was “Mmbff plbbr slbbd...”

“No, don’t wanna hear it. You and your maths take all the sexiness out of being nude.”

“I thought nudists don’t think of sex...”

“Heh. I never said that. At least *I* think of it all the time—and so do the other teens. It’s just that we can’t *act* on our thoughts. That’s why it’s so brill when my sisters can wank me when I’m here and

now you've done it too. Hey, I came over to tell you that since that's Jennifer and Christie over there, their brothers must be here as well, so I'm gonna go run them down. I'll be back here with them, as soon as I can."

So I went over to meet the girls' friends. Yes, I met them. Nice kids, but... Not to be snarky or anything, but they were a typical group of high school girls, judging by their comments about "this hot boy I dated last week" or "ohmygod, this nerdy guy's been trying to look down my top" or "this really stupid jock in my school was trying to get me to go out..." One thing I noticed... No discussion of clothing. Now, in my (not very extensive) experience of being with high school girls, one topic that is *never* overlooked in any discussion is clothing. Not a whisper about clothing was heard from this group, though. I'll bet you figured out why, too. Teen girls in high school talk about boys, clothing, movies, books and TV, and more clothing. Teen girls in nudist parks talk about... boys... and boys. Yep, boys. Just sayin'. In this park, anyway.

I already know what the boys talk about. Always the same, and wherever they are. Girls, sports, video-games, sometimes cars, and girls. I tutored lots of boys in Fairbanks and did an informal study. Just listening (erm, eavesdropping, actually). And I had overheard the boys talking here yesterday. Yep. Same topics.

Whilst we were there chatting, another small group of boys and girls showed up and came over to us and it was "introduce Emma" time again so I had to recite my abbreviated getting-a-degree and Program-not-happening stories again. Many of the kids in this group would be staying for a week or two; they all knew each other from past seasons, so some time was spent in catching up on their past year's news.



*Randy, Jason, and Justin come to join Emma and Andrew*

Soon Andrew returned with three blokes. One was a big guy, over six feet and, crikey, ohmygod; he was cut... erm, not down there. Higher up, you know? Six-pack. Shoulders. Pecs. Biceps. A bloody smokin' hot arse. And between his chiseled thighs flopped this huge... Jeez, fuck it, Emma! Eeep, shit, no, *don't!* Eewww! Stop that right *now!*

Found out he was Randy, a high school senior who played fullback in football. Damn, what a name too,

right? The other two blokes were twins and identical too. Really identical; nothing showed to tell them apart and believe me, lots of things showed. Even their naughty bits were identical. I did look. Carefully but discreetly, you know? Some things need to be accurately documented, after all. Especially Randy's... damn... Gonna kill myself. Really.

It turned out that the twins, Jason and Justin (really? Why do parents do that?), lived near Hershey, Pennsylvania. Hey, that's actually where the chocolate candy is made. It's named for a town? Who knew? Anyway, the kids were joking about some strange town names, some near Hershey. Why that

subject came up, I can't say. I was too busy to pay attention since I was looking at all the boys here, checking to see if I could determine if any relationship existed between their heights and their... Grrr. I need blinders. I absolutely need blinders.

Anyway, I heard them laughing about some strange town names: Hazard, Bird-in-Hand, Noodle Doosie, Scalp Level, and Paradise... but then the twins began to call out some really way-out ones, like Climax, Free Love Valley, Fertility, Jugtown, Moon, Virginville, Blue Ball, Intercourse, and Puseyville, and those names really got the kids rolling on the floor in laughter. A thought: "Intercourse"? Really? The town's actually named "Intercourse"? What if the chocolate factory were located there instead of in Hershey? Intercourse bars? Emma, just *quit* it now...

Anyway, the twins' high school is in a small school district just outside Hershey and they mentioned that the Program had started in their school last autumn. When this tidbit of news dropped into our conversation, it caught every single teen's attention; every one of the girls and the boys who were at the pool now—there were eleven of us, immediately stopped talking. Then a clamor arose—everyone began demanding to know all about it. The twins were juniors and hadn't been selected, but they did have some stories to tell about all the rot they saw.

I guess hearing their stories beat any other recreational activities in the offing, and since the sun was again back behind some very heavy clouds, we all went off to the clubhouse to sit somewhere comfortable to hear Jason and Justin's stories.

I really need to find a way to tell them apart. Andrew told me that the twins can even fool their parents sometimes. And the twins had told Andrew that they've switched partners on dates a few times, just for fun. I wonder if their dates ever figured that out. (Several hours later, I learnt that they could indeed be told apart, but not in... erm... a socially acceptable way. I had mentioned their identicalness to Jennifer, a girl who also went to their school, and she told me that Justin's erection bent a bit to the right whilst Jason's bent left but I should *never* reveal to them the secret, that the girls they dated knew about that difference. Oh my. She had experiences with both of them where she had personally observed this trait? She did, she told me, smirking, and then enlightened me about all the powers over boys wielded by a girl with an educated mouth. I was, well... blow me down... oh, shit. Ignore that stupid pun; didn't mean it. Sweet Jennifer doing that? It must be the effect of the Program on the kids' morals. Or something.)

## Chapter 10

“So when did the Program start in your school?” Gary asked when we got settled. He was the brother of one of Sam’s friends.

Jason (gonna assign the name arbitrarily here) answered. “Last fall. Only a few of the other schools in our county have it yet. I guess we were among the chosen lucky ones.”

He went on to tell how it got started—the typical way with a school assembly, the first group of unfortunates whose names had been picked was called up to the stage, they were made to publicly strip starters (some were force-stripped), and then had to spend the rest of the week naked. He told us some of the Program rules that had to be followed (a few rules differed slightly from those I had recalled from the Fairbanks Program pamphlet. For example, in his school the outreach part wasn’t mandatory but the relief sessions were and the teachers usually chose the pupil to give the relief). Theory: The national office was trying variations of some rules to see what worked best, and the affected schools were so far apart and isolated that no one would notice. Sounds like a good guess, anyway.

Another question was about how the kids reacted to being picked and Justin took that one.

“As you’d expect. Everything from resignation to complete denial. One girl just ran out of the school when her name was called on one of the Monday mornings—that’s when they start each Program week. I heard that she transferred to another school. Oh yeah. There’s a big legal fight going on about exemptions too—they aren’t giving any, even medical exemptions. Nobody’s gotten one, even a girl I know who’s in therapy for being raped was refused an exemption. So far she hasn’t been picked but she told me that she’d definitely refuse to participate like the religious kids do. But the huge legal fight that we have in our school is about getting a religious exemption.

“Our area’s got a large number of very conservative religious sects, both politically and socially conservative. Most of those girls wear these long-sleeve plain dresses that go down to the floor and even the guys dress in simple white long-sleeved shirts and dark pants. You’ve heard of the Pennsylvania Dutch? Well, the word’s not actually ‘Dutch,’ it’s ‘Deitsch,’ meaning ‘German’; most of the original immigrants who settled there were from the area of Europe that’s now part of Germany and Holland. Maybe a third to half of the kids in our school are from these families and they’re vehemently opposed to the Program on moral and religious grounds. When the churches learned that the Program won’t allow for any religious exemptions, this past spring they sued the school and there are two court cases going on now. So now if kids claim that they’re religious, the school doesn’t try forcing them. I remember from my soph civics class that the Supreme Court has ruled several times that religious freedom overrules all other freedoms and no law can be made which takes away the right to practice one’s religion freely. So guess how many kids got religion once that lawsuit began?

“Jason,” he asked (hey! I guessed right!), “I remember freedom of press, assembly, and speech, but do you remember all of the personal freedoms that certain laws can restrict?”

Jason: “Let me think. Right, it’s those freedoms, bro, and they can be limited by laws that the Court found constitutional, if public welfare or national security can be affected. Also, let’s see... yeah, property can be seized without judicial action in certain cases. That’s a fifth and fourteenth amendment violation. Umm...”

Justin: “I remember another. The right to own a firearm can be limited by law. Oh, and the right of personal freedom that’s in the thirteenth amendment which stopped slavery, was violated by the involuntary draft laws passed to get manpower for the armed forces, but the draft law was upheld because the law benefits the nation.”

Jason: “Yeah, Good examples. But the Supreme Court’s rarely upheld a law which interferes with

religious freedom. The only exception I can think of right now is the anti-bigamy law passed against the Mormons. So the conservative Christian kids in our school are refusing to participate and they're also making a huge outcry about being forced to be bystanders in the sexual activities they have to watch, like relief sessions or Program demos in class. Also they really object to making boys use the girls' locker room and bathrooms, and girls use the boys', like the Program requires.

"So far, the courts have backed the religious groups but the Program headquarters appealed the decisions and are pushing back that it's a federal program, not state, so state courts lack jurisdiction. It's at an impasse now and the appeals court will need to decide, but since so many of the kids in school come from conservative religious families, that most of the school will refuse to participate when you count in the others who say they won't do it."

"Don't they get forced?" That was, um, Sara.

"In the beginning, kids were," Justin replied. "The first day in the Program assembly, the principal was slick and didn't pick any kids he knew were from a religious family. He picked kids who he and the Program rep figured would be too scared to refuse and they were mostly right. But half of the kids didn't even go to the assembly—the religious kids boycotted it. Anyway, watching what happened to those kids was awful, being made to strip on the stage like that. After that first day, kids would be called to the assistant principal's office to strip and there would be a couple of teachers there to 'encourage' you to undress. I saw what happened in the second week of the Program when I had to take an attendance report to the office. When I got there, I saw this naked girl huddled in a chair in a corner of the office and crying, trying to hide her tits, while one of the school counselors was crouched next to her and talking to her. It sounded like he was trying to get her to come out of the office and go to class, but she didn't move while I was there waiting for the secretary to finish entering the report.

"We heard later from a guy who was in her group, that when they were told they were in the Program and had to strip, she began crying and wouldn't undress, so the teachers stripped her. When the kids were told to go to class, she refused to leave the room so the teachers pulled her out to the outer office.



*Justin and Jennifer relate their Program experiences to the teens*

That's when she just slumped onto the floor there. Two of the girls got her onto one of the chairs there where she just curled up and that's where I saw her maybe five or ten minutes later. They had to call her parents to come get her and I haven't heard what happened to her after that."

"I heard," Jennifer said. "Yeah, she was in bad shape. She had been sexually abused by a relative when she was thirteen. She's being home-schooled now."

"Damn." Sara shook her head. "That's disgusting,

being forced like that... That's what worries me, being forced. They showed this video in our school this spring, stuff showing the Program in schools. Creeped me out and now I have nightmares about what'll happen in my school this fall."

A number of other kids mentioned having bad dreams too. *Hmm, I never did...* I think I didn't, anyway; at least I don't recall having any. Maybe that means that I felt secure that I'd be able to stop anything bad from happening? That I didn't feel threatened by the Program? No, I certainly *did* feel threatened, but I acted to oppose that threat. Yeah, with my army. So maybe my helping to plan the Program opposition kept the bad dreams away. Oh yeah... another idea. I kinda like to use my dream times to solve problems. I read about some famous scientists doing that, so I looked for more info about using dreams for planning and found that it's real. It's called "lucid dreaming" and there are tricks to do to learn how to do it. So maybe that's why I don't remember any bad dreams—I'm not letting them happen. Whatever... crikey, I'm losing track of the conversation around me. Wilma was asking a question.

"...and I hope those dreams stop; they're making me really anxious. What happens in your school now with kids refusing?"

Jason replied. "If someone's gonna refuse, they don't go out when the cattle-call is announced; they just stay in their classroom. We're talking about more than half the school who're conservatives and they just don't go. There are so many now—even some kids who aren't from religious families are pretending they are, I think. And lots of the non-religious kids think that the situation is so unfair, that when school starts up again, no one will agree to strip."

I raised my hand and got Jason's attention. I'm too polite to just shout out (yeah, right?). "My high school in Fairbanks Alaska tried to start the Program..."

Gasps. And comments: "Really?" ... "Naked in the Arctic?" ... "You guys must have some great metabolisms!"

"Ha. Very clever. No, they *tried* to start it but we stopped it *COLD*. And that's not just a pun, either. That's exactly what we did. Stopped 'em cold. We literally froze 'em out. We made the school buildings way too cold to wear anything less than a parka, didn't we."

A lot of laughter.

"But what I wanta say is that a lawyer got an injunction against our school, warning them that forcible stripping of the kids was a felony; it was sexual assault and battery. I'm sure those laws must be the same in every state. The teachers simply can't touch you, it's a criminal law violation if they do. The attorney said they can't intimidate, threaten, or coerce you either. That's still assault—making the person think he'll be harmed in some way."

There was plenty of ooohh'ing and aaahhh'ing at my revelation and Justin practically shouted, "*YES!* That's so goddamned *CRAZY!* Emma, you're a gem. Amazing!"

One of the guys, William was his name, asked, "There are lots of bad things happen that I heard of too, like teachers getting carried away, but did you see anything good happen? If the feds started this sucker, they must have thought there was some good in it."

Justin replied, "Yeah, teachers do get carried away. Absolutely, that happens. But anything good? Shit. You see naked kids. Yeah, seeing naked kids is cool, right? Are you interested in seeing random naked chicks... or guys? Hell, you got that right here; you can see all the nudity you could ever want. But, well, most of the kids in the Program look scared and miserable, especially on the first couple of days. That's not cool at all. But the one thing you see in school that we can't do here is to jack off in

public...”

“Eewww...” from several girls.

“...or get someone to help you get off ... ‘cause the Program has that relief rule. Is seeing that crap a good thing? You tell me.”

“Did you see that happen, Justin?” This from someone behind me.

“Damn. All the fuckin’ time, the teachers made the kids do it. Hey, I don’t wanna scare anyone, talking about this shit. Some of it is kinda intense. Some of you guys are in middle school—maybe this isn’t for you... JoAnna, you look like you’re havin’ trouble with this crap. You okay?”

Two of the younger kids got up, JoAnna and Tracy.

JoAnna said, “My mom doesn’t want me to listen to talk about bad sex stuff in the Program. She said that if the kids talk about the Program, I have to leave. She wants to talk to me about it after she learns more.”

“And I think I should wait,” Tracy said. “I’m only eleven so the Program is far away and I don’t want to get bad dreams.”

The rest of the middle schoolers stayed, including Abi, who announced, “I vote to hear what you saw.”

Justin continued, “Okay, if you’re sure about this, then I’ll tell you about the first time I saw a relief session. It happened in the first class I was in that had a Program kid in it on the second day the Program was running. This guy came into the classroom and he was so hard that his dick was just drooling. Apparently some chick in the hall had begun stroking him but then she went away laughing, leaving him all wound up.

“The teacher told him that his hard-on showed that he needed relief so the teacher looked around the classroom to see who to pick. There were a lot of hands—man, I was surprised at that! I didn’t think that many girls would want to do that publicly, but then I thought, well, it’s safe—they won’t get forced to go any further, it’s approved by the school—yeah, right?—and a good way for the girl to get some no-strings-attached practice. Isn’t that a win-win-win? Whatever. Anyway, the kid whispered to the teacher to please pick his girlfriend; he agreed to do it and picked her.

“And then she gave him a hand job that turned into a BJ.”

“Hey, what’s so intense about that?” Gary complained. “I’m gonna have that fuckin’ shit starting next month in my school and I need to know what to expect.”



*Justin describes a Relief blow job he saw in his classroom*

Melody broke in, “They showed a Program video in our middle school this spring. I’m gonna be a frosh and that stuff in the video was just too gross for words. Sara said she saw a video like that and she’s in high school. Didn’t you see a video like that?”

“No, I’ll be a junior,” Gary answered. “They didn’t show us anything. Maybe when we start school they’ll show something. Anyway, Justin, what happened in that... umm... relief?”

“Okay guys, I’ll just lay it out for you, no holds barred. The relief kid had to sit in a chair at the front of the room and the girl came over to him and used the pre-cum oozing out of his cock’s piss-hole and smeared it over his knob. He was moaning as she stroked it, starting at the tip and going down to the base of his shaft and then going back up again, faster and faster.

“Then the whole class gasped when we saw her take his dick into her mouth and suck on it; then she took it out and went back to stroking it, then into her mouth again. Pretty soon he began groaning and bouncing his ass up off the chair and his face turned red hot and then he shot one jet of cum after another, the first went into her mouth, but a lot went all over her face when she couldn’t swallow fast enough.”

This time there was a whole chorus of “Eeeewww”s from almost every girl. Me too. In the face? Yuk.

Jennifer broke in. “Girls would get relief too. Once a guy licked a girl’s pussy in front of my class. In front of *everyone*. Not in private. I’d *never* do that. That crap happened in the first couple of weeks with only a few kids going wild like that. Those weeks were the only time like that; only a few kids just acted crazy-like, but then all the kids started to rebel and by the end of the school year, not that many were doing the Program. But there were some kids that did get off on doing it, literally, and did do that shit.”

“Hey Justin,” Sherrill called. “You said a chick was stroking that guy in the hall and ran away? What was that all about?”

Jennifer answered, “I’ll tell this, okay?” Justin nodded. “Yeah, that’s the Program’s thing called ‘reasonable requests.’” She made finger quotes. “Random kids can request the naked kids to do things, but they’re supposed to be quote reasonable unquote. The naked kid is supposed to decide what’s reasonable and the rules we got said making them do oral sex, having any penetration into the body, doing any physical restraint, um... that’s all I guess, aren’t reasonable and those requests can be refused. Posing requests are always allowed—the rules define them as quote reasonable unquote and kids can ask to fondle a Program kid too but then that gets into disputed areas. Like what kind of groping is reasonable, anyway?”

“So what *is* reasonable?” Sara asked. “I’m not liking this at all.”

“From what I saw,” Jason said, “those kids need to decide it on the fly. Once I saw this guy just grab a girl’s tit and squeeze it. That hurt her. Doing that was against the rules, though. You’re supposed to ask; it’s called a ‘request.’” He made finger quotes.

“Yeah, that’s right,” Jennifer broke in. “The whole term I saw plenty of boys ask the Program girls to let them touch the girl’s boobs and they basically had to allow that, but the boys usually didn’t know what they were doing and were rough with them, like they were squeezing potato sacks or something. And lots of boys asked to touch girls’ pussies too. Every girl I saw refused that. Eeeww. Who knows where those fingers had been? The whole idea of those so-called requests gave me the creeps. And we saw the boys traveling in little packs to harass the girls with their requests too. We were told to be respectful to the Program kids; the Program was supposed to help us with our sexuality—that’s what I think the Program booklet said. Well, the requests only help the voyeurs and abusers.”

There was some chatter among the group over Jennifer's comment, and Andrew leant over and whispered to me, "Is it okay to mention what you and I discussed last night? No personal details?"

I nodded. "Oh sure. I trust you."

Andrew spoke up and the chatter stopped. "Emma and I had been talking about the effect on a teen of suddenly seeing lots of nudity after a lifetime of textile living. You all know that she's new to this nudism life, don't you. Emma also led the kids' resistance to the Program in her school; she hated the idea of the Program too, hated it so strongly that she went to war with her school over it. Some of you heard how she mobilized her army, didn't you. Then before, William asked if there's anything good in the Program. Justin mentioned one thing that might be a possibility: a safe place for a girl to try out giving oral sex, but that's so extreme an example that it melts my brain just thinking about it. And then Jennifer was talking about disrespect for the naked kids; how some boys get out of control when they see a naked girl. Emma had asked me a question last night, based on her first day's experiences, that really got me thinking about how textile kids can react to seeing nude people and how I personally react.

"Just now, listening to all the talk about what you blokes saw in school where kids were forced to be nude and how the other kids reacted and treated the Program kids as objects for their entertainment, that rot is just bollocks. It's all so wrong. And I thought of how all of us kids here at the park view being nude together and how we treat each other with respect—that's the opposite to what the Program does, isn't it. Emma told me that her first experiences here surprised her and she thought her intro to nudism was brill; that other teens would benefit from doing this if all that sex rot is lost out. Probably those spackheads who mauled the girls had zero experience with girls and just went crazy at the chance to grope a girl with no consequences. They never learnt respect, did they.

"But thinking about how we act with respect toward each other here, I can see a possible reason why those dumbnuts came up with the Program. Could their idea have been to ... erm... normalize nudity among teens? After all, normalizing nudity is already happening in our general society, isn't it. What if the Program was simply allowing voluntary nudity in schools and no sex, like here at the park? Ideas?"

Several kids had ideas about that. Many of the ideas had to do with how such a thing could be set up and then run to avoid becoming as bad as the Program itself. But the idea did have general favor, because it could mean that many kids could be nude together; they wouldn't be lone targets of opportunity for abuse; and could mutually support each other.

"Oi, you blokes, I remembered something," Sam spoke up.

I was surprised; she generally kept quiet in our larger group discussions.

Sam went on. "What Andrew said, his mentioning of normalizing nudity reminded me of something I read in a book I found on my dad's bookshelf. I remember something it said, how nudity isn't remarkable if it's common."

"What book was that?" Andrew asked. "I think I read something like that in one of Dad's books too."

"Let's see... we don't have our mobiles. Oh, the resort's public-use laptop's just over there. This'll be quick."

While she was Googling the book, we were all agreeing that any major changes in the Program would never happen, Then Sam called to us.

"Found it! It's in a book by Martha Nussbaum. She's a philosopher of law and the book is *Hiding from Humanity*. It's about the role of shame in people's lives and social life and how the law treats it. The quote is, 'Nudity quickly becomes unremarkable when generally practiced.' Isn't that exactly the point

Andrew was making?”

“Blimey, thanks, sis,” Andrew praised her. “Yeah, now I recall that book too; it had this dreadful picture of an old naked woman on the cover. Shit, you read that whole thing? That book’s huge.”

“I read a lot of it. The cover’s why I picked it up,” she answered. “Then I started reading. I kept going because it seemed to have info about nudity and law and those parts were interesting. Hey, what did you blokes talk about whilst I was on the computer?”

“We were agreeing that the Program would be better without all of the sex shit you guys were talkin’ about, but we know that the feds would never change anything,” Randy said.

“Unfortunately,” Jennifer agreed. “And based on the limited number of teachers and staff that I saw who were involved with the Program, they all seemed perverted, how they enjoyed tormenting the kids.”

Justin broke in, “Probably because the Program itself is basically run by perverts. They all probably have a repressed sexuality or worse. But those in the school, they’ve been given all that power over the kids, and some of the teachers are as bad as any of them.”

William said to Justin, “Yeah, the bad teachers thing. That reminds me of something you said before. You mentioned you saw a teacher doing stuff...”

“Oh yeah,” Justin said. “Not just one teacher. The Program has this damned class demo rule. You’re forced to allow teachers to use you in classes as a prop or teaching aid, even if you object to how humiliating it might be... but according to Emma, we might be able to get all that shit stopped... forced to do what you don’t want is assault. Thanks again, Emma. Anyway, you guys, how do you want this again? Censored or in detail?”

“How bad was it?” Sara asked nervously. “Was it really awful?”

Justin shrugged. “I thought it was terribly humiliating for the Program kids and felt bad for them.”

Jennifer spoke up. “Hey, if we tell you guys what it’s like, maybe you all will refuse like lots of kids at our school plan to do next month.”

Justin looked around. “Shall I tell the details?”

Most of the kids agreed, but reluctantly, so Justin began.

“Well then, here’s what happened in my biology class. It was an anatomy unit; we had a Program boy and girl in the class and the girl—she was a very shy kid—had the misfortune of being in the Program that week. The teacher told the girl to sit on his desk facing the class and lean back on it and she didn’t want to do it. So he pushed her onto the desk and leaned her back and told her to stay that way. Then he put her feet up onto the desk and spread her knees wide apart, exposing her pussy. The poor kid was really crying while he was posing her like that.

“I wanted to interfere, but we had been warned not to get involved with interrupting any class demos or we could get put on the Program for up to a month. Then he got the boy to copy her pose, lying back alongside her, and you could see all his junk just hanging out there exposed. The teacher handed out worksheets showing the male and female bodies that were totally blank in the crotch and we had to come up to the desk, two or three kids at a time, and sketch in the missing anatomical parts on our copies.

“He made the girl pull her lips open too and we had to draw the insides we could see there. For the boy, he told him to get a hard-on and we had to draw that too. The homework was to label everything

on the worksheets. That was awful for them, and totally unnecessary. We could have done the same thing with a plastic model.

“Those kids were total wrecks after that class and the girl never came back to school after that. Maybe she’s being home schooled or went to a private school. They told us the Program was supposed to make us comfortable with our sexuality. I wonder how many kids become emotionally scarred, though.”

Everyone was listening with stupefied expressions. The story was almost unbelievable.

I heard a plaintive voice, “I don’t wanna do the Program...”

“Then don’t,” I said. “Refuse. Forcing you to get starkers is a felony.”

“But they won’t let us graduate,” from another.

“Lots of ways around that,” I answered. “I looked into all that rot. There’s a GED. Also, the colleges’ and unis’ admissions people are aware of what’s going on and will work with high schoolers who run into that kind of problem. At least that’s what I heard in Alaska. In Europe we have the international baccalaureate exam which can substitute sometimes for a secondary education completion. Maybe that’s like the GED. That’s not an easy exam, though.”

“But we had something else happen,” Jason said. “It wasn’t part of the Program. Justin and I escaped it, but it caught the sophomores and we think that it’s evil. It could be a problem if it goes to other schools.”

“If it’s not part of the Program, how would it get to other schools then?” I responded.

“We heard that the state curriculum committee was somehow involved so it could spread from there. You know how stupid ideas propagate.”

I laughed. “That I do. What was this stupid or evil thing?”

Jason shrugged. “The whole school was upset over this one class when we heard about it. When they began to run the Program, they also started a three-session unit in sophomore hygiene called Advanced Sex Ed. Thank God Justin and I were juniors ‘cause all the sophs had to take it. Kids were partnered and they arranged the sessions so there were equal boys and girls. There were two teachers for the class, a man and woman. We don’t know where they were from, but they weren’t on the regular staff. They were pretty young, so maybe they were student teachers.

“When the first group of kids came into the room when that unit began, the whole classroom floor was covered with mats and everyone was ordered to strip naked. I heard that caused chaos then, and half of the kids completely refused, so they were sent to the office, got detention, and were told they would fail the whole hygiene course.

“When the rest of the class got settled down—the kids who stayed did get naked—the teachers showed the class a video about sex and sexual response which had scenes of how to locate erogenous zones, sensual teasing and stripping, kissing, foreplay and masturbation, and ended with scenes showing blow jobs and pussy licking! They were told that in the following two sessions, they would learn how to do that stuff and practice with their partners.

“The kids were told that in the second session, they would be doing the exercises that were in the video with their partners, starting with the basic ones, and by the third session, they were supposed to show that they could make their partners cum using oral sex!”

There was another chorus of “Eeeewww”s and a few groans.

Jason went on, “But then when I heard about what happened in that class in the second session, it just about blew my mind. When the kids who did show up for it, only eight guys did, when they got to the classroom, the teachers were naked! But with just boys there, the class just fell apart so that session just stopped there. You can just imagine that scene. I don’t think that the teachers dared to try to get the boys to partner. We heard that the same thing happened every time they tried running that sex ed unit—only a few wound up going, almost all boys, because lots of the sophs, when they found out what the class was about, said that they would just cut the class when their group was scheduled.

“We heard that maybe three-quarters of the sophs, probably more, skipped it so they failed and they’re supposed to have to redo it this coming school year. Late this spring, the school announced they would be redesigning that class for the fall and they would be pulling boy-girl partners out of every gym class on their gym days instead of having a scheduled class. If they skipped it the first time, what’s the chance that they’ll do the class this year?”

“So how can you stop *that*?” Jason demanded, looking at me.

“Bloody damn, that class is right out of Hayword’s booklet,” I muttered. Aloud, “That’s... erm... that class really is from the Program—it’s an add-on, actually. In Alaska, I had some... call it inside info ... about various Program plans from when we got it stopped. The national office has a list of suggested add-ons... well, they called them ‘enhancements’ ... that schools can include when they run the Program. One was like this sex-ed class. Another was to make the locker rooms, showers, and boys’ and girls’ loos into unisex areas...”

“Eeewww!”

“Yeah. My thought too. Another was naked cheerleading...”

The girls went “Eeewww!” but the boys looked thoughtful at that one.

“...naked gym classes...”

More “Eeewww”-ing at this.

“...and various health and hygiene class units, and the one you told us about looks like one of those. It’s part of the Program if the school wants to add it so that’s where it came from. There was more disgusting rot, too. You mentioned that only boys showed up at the second session and it fell apart? Well, guess what another Program ‘enhancement’ was. Learning about single-sex rot. Gay and lezzie sex.”

There were gasps from everyone and several cries of “No!” and “That’s bullshit!”

“It’s true; the Program Office has a suggestion that schools require classes to have a boy-boy and girl-girl sexual contact component as an optional enhancement. There are a number of single-sex public high schools in the country. How do you think that they’d be able to run the Program in those schools unless they had rules about requiring homosexual contact? It looks like your school didn’t go that far and those boys in the hygiene class weren’t required to partner with each other.”

There were more “Eeewww”s and various comments of disgust.

“Yep,” I told them. “It’s horrid, I agree. I have no problem with kids who want same-sex contact, but if you’re forced to do it, then that’s bloody horrid. When I read that rot, it turned my stomach. But back to your question. How can you stop that sex-hygiene class? Maybe by stopping the Program. But here’s a thought. I’m no solic... erm, lawyer, but it seems to me... Maybe you could try this. If they say that they’ll fail you for not participating when you refuse to strip and not do that sex rot, that’s more than coercion—it’s extortion. That’s making a threat to harm you unless you give up something or you

agree to do something.

“The harm is failing you and the thing that they expect you to give up is your personal privacy and the thing you have to agree to do is to engage in sexual activities. I seriously believe that’s legally an example of extortion. They give you a passing grade only if an adult observes your forced sexual activities with another minor. I’m sure that making this class mandatory breaks all kinds of laws. What I think you could do is to tell the teacher that you’d bring a police officer to the class and have him listen to the request—performing sexual activities in exchange for passing the class. I’m sure that even making a *request* like that is a felony. The principal would even get arrested, I suppose. Or get a lawyer and an injunction. That avoids a confrontation but costs more.”

“Wow, way to go. Emma.” ... “Emma, you’re a genius.” ... “What a great idea.” Everyone chorused when I finished.

All of us kids were pretty thoughtful and a bit shaken after our discussion session so we all just gradually drifted off in small groups to deal with our thoughts. What I had heard from Jason and Justin about their Program experiences was terribly disturbing and I was so grateful that we had prevented my school from beginning the Program.

Hey—I learnt how to tell them apart! When Jason smiles, his eyes crinkle a bit at the outside and Justin’s don’t. And when Justin starts talking, he does this little squint for a second—very quick. I feel so proud of myself. When I tell Jennifer, she’ll be happy that she won’t have to get them naked to find out who she’s with. Hmm. On second thought, maybe not. Okay, Emma, just stop it.

Some of the kids from our session found their parents and told them about what we had discussed, mentioning my suggestion of how they could refuse to participate in the Program when it came to their school. I quickly learnt about this, because later that afternoon, quite a few parents tracked me down to get more information; their kids’ schools were to start the Program in September and they wanted to protect them from having to take part.

I told them about how I stopped my school from using force on us kids by getting an injunction that warned the school officials that any use of force or even verbal intimidation to require a kid to strip would be prosecuted as a felony. I told the parents that they could use a similar method to prevent their kids’ school officials from using force or intimidation—not necessarily by court order but maybe by simply warning their principal about the potential felony charges he or the teachers could face for sexual battery if they touched a kid. They also asked me for details about what I had learnt about what the Alaskan universities would do about admitting a student if their diploma had been withheld. I told them that they could contact the local universities to see if they would deal with the non-graduation rule for not participating in the Program in the same way. They told me that they’d definitely take my advice and contact their schools this week and wouldn’t even wait for the Program to begin in the school.

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I had quickly learnt, even before my first two days at the nudist resort were over, that the people who came here were a real cross-section of the area’s community, both socially and economically. In fact, that was true of nudists in general. I found out that the people who came were intensely protective of their privacy and kept their nudist life completely separate from their “normal” life. I also found out that you didn’t ask about people’s last names or their occupations, but that didn’t mean that people couldn’t volunteer the information, and most did, when they got to know you. Thus I learnt that the members and guests of the resort included tradesmen, service workers, teachers, professors, police officers, doctors and medical people, members of the military, politicians, shop owners and clerks, executives and office workers—the whole range of society.

One visitor whom I met during my first week at the resort was a very interesting and charming older bloke. The gent was even a judge; I learnt that because he chatted with me, telling me what he did in his textile life and how he became a nudist, and then he asked me a fair amount about myself. It seemed that he already knew a lot about me, probably from the park scuttlebutt. I hadn't been aware that everyone in the entire resort had either figured out that I was that notable Dr Emma Clarke of superconductivity fame, or had learnt it through park gossip, but I sure figured it out quickly because everyone I met commented on my notoriety. Nudists gossip just as well as any other social group, apparently. Or even better. It seems that with the lack of clothes, people let down their guard much easier, making tongues much looser than usual. Blimey, nudism is even better at removing one's inhibitions than alcohol!

In the evenings after clubhouse activities and before bed time, the three Marshall kids and I would play cards, a board game, watch a movie, or just cuddle and chat about the day. Within a few days of our being at the park, the girls and I started this little night-time game with Andrew; the three of us would do a rota, one of us girls each night, and wank Andrew till he blew, keeping score for volume and distance. I won't tell you who eventually won that game (wasn't me, more's the pity). Also, the cuddling was blindin' brilliant, and so was what usually happened after that, when Andrew would wank me (he said that kids here called it "jilling off," 'cause guys "jack off." Who knew? Crazy Americanisms).

In the past, after I had found that little organ down there could give me pleasure, I had obviously done it solo. I would get this nice gentle flush washing over me and then I would sleep better. But when I allowed Andrew to do it to me that first time, he did something that blew my mind into shattered shards of tiny little sparks. That was my first real orgasm! And when he repeated the experiment, the result was reproducible! For a physicist, experimental reproducibility is a very big deal. Well, this one was an even bigger deal. Now I know why people seem to make such a huge fuss about orgasms. Who knew? Well, I do, now. I love those reproducible experiments.

The four of us kids would cuddle together before falling asleep, and after a few days of cuddling with them, any remaining inhibitions I had about naked bodies were gone. Our hands tended to wander to the others' bodies and caress any warm flesh that we happened to touch. Sliding my hand over another girl's firm boobies and nippys was a totally new experience. So was the experience of feeling the muscles in Andrew's rock-hard arse cheeks and comparing the texture of his bum's flesh to Sam's silky smooth tush. This was all so blinkin' awesome; I had never felt so warm and loved before, and my feelings for Andrew were just indescribable. I simply adored snogging with him. He knew what my firm limits were and never exceeded them, nor did he complain. He was also very respectful of his sisters, treating them with love, and they returned it. In stereo.

I also discovered the delight of oral pleasuring with Andrew. It started when we all were cuddling and he bent down and playfully kissed one of my nipples as I was lightly stroking his wonderful erection. I squeaked and Abi looked over.

"Is Andrew tickling you?"

"Aahhh... no, he kissed and licked a nipple. A jolt went right to my fanny."

Sam sighed. "I wish Andrew could do that to me, but we agreed never to do any oral sex play with him. No kissing below the neck. Andrew is afraid that we'll get carried away and do more than siblings should. We've always drawn the line at doing anything more than wanking him. But you can play with him—you're not related and being honorary cousins don't count."

She giggled. "Carry on, but I won't say that you'll keep calm..."

I kissed Andrew and licked his ear. He shivered. I was so damned horny I couldn't see straight. It looked like Andrew was even hornier.

“Andrew, remember what Justin said about the first relief session he saw? Looks like you need relief down there. I'm gonna try what Justin said he saw in class.”

“Oh god, darling, you sure?”

We snogged a bit more and then I began kissing his chin and then his neck; then I moved down to his chest where I stopped to suck on one of his nipples, then the other. He groaned and his cock lurched when I sucked his nipples; I guess boys' nipples are sensitive too? Who knew? The skin of his chest is silky smooth; there's just a little fine hair between his rock-hard pecs, and just rubbing my cheek on those nicely shaped muscles made me really hot. I kept traveling down his front and finally got to his cock. Instead of taking it into my mouth—I was still a bit apprehensive about doing that, but Jennifer's words came to mind—“It's just like sucking on a finger but soooo much sexier”—so instead, I licked up and down the side of the shaft and then tickled that cute “V” shaped spot on the bottom of the head—the frenulum? I think so—with the tip of my tongue. Now that got a reaction; he jerked and I heard his breathing quicken.

“Oh, shit, Emma, that's brill; do that a little more,” he moaned.

I heard Sam's and Abi's cooing words of encouragement and heard their breaths quicken too.

I ran my tongue up and down his penis—no, cock—several more times before I finally worked up the courage, opening my mouth and letting his hard roundness slide in. Oh shit, I'm sucking off a boy! I gave an involuntary shiver, steeled myself, and sunk my lips down the shaft till I had about six centimeters in. Only about a third of the way. Bloody frikkin' awesome; why had I waited so long to do this? It was just like sucking on a finger but soooo much sexier—now where had I heard those words before? Doesn't fuckin' matter, does it. And the object being sucked was way, way thicker than a finger, too.

I wiggled my tongue and felt its flat part sliding over that sensitive spot on his cock's underside and he hissed and his hips jerked. Woah, that's ace. So I teased the spot for a little bit longer—same result—that's *really* ace, another reproducible experimental finding. So then I decided to experiment a little further: let me see how much of him I could fit in. I had already gotten six centimeters in; I estimated he was maybe 18 centimeters long (don't look it up; that's about 7 inches). He's a respectable size, apparently, based on my current but limited sample size of four erect cocks. Hmmm, wonder about Randy's...? *Shit! Stop it, Emma! You already got a boy!*

I began to push my mouth down the shaft, then rising up a bit, then trying to go deeper with each bob of my head but making little progress. I only could get two more centimeters in before my gag reflex was too strong to go further. That made me cross; I couldn't even get half way down. Oh well, I decided to just stick to the head and simply use my lips and tongue to tickle and suck on it, whilst I used both hands to stroke the shaft, which actually seemed to be a little thicker than before and was definitely more rigid now. I was going on that thing pretty enthusiastically now.

Andrew had begun panting and trembling. “Emma... Emma...” he choked. “Gonna...need to... get off me... not in your mouth... oh please...”

I had already resolved to take Jennifer's advice and see what getting a mouthful of ejaculate felt like. According to her, if you did that, the boy would worship you forever. I already knew that Andrew worshiped me, but I thought that taking his offering would be the most supreme act of love I could do for him since my virginity was off the table. So I reached around and gripped his arse cheeks and pulled his groin into my face whilst I sucked on him even harder.

Suddenly he let go with an anguished moan and then grunted two, three, and four times, as I felt his cock swell and four pulses of a warm, slick, pasty fluid filled my mouth. I had been expecting a strong orgasm since I had seen him shoot before, but I hadn't entirely expected the effect of having that amount of semen fill my mouth so quickly. A little of it dribbled out of my mouth before I could swallow it. This wasn't the greatest taste; it was a bit viscid, had a mucous-like texture, salty, and had a trace of sweetness and a kind of bleachy odor. Well, I could stand doing that again; it wasn't that terrible.

Andrew heaved a great shuddering sigh.

“Damn, darling, that was... my god, like heaven. Come here, sweetheart. My lover.”

He reached for me to pull me into a kiss but I was a bit reluctant—did he want a taste of his own semen?

“You swallowed my cum. It won't hurt me, darling.”

That settled it, so we began another vigorous snogging session; his fingers on my nipples felt brilliant as he pulled and pinched them until my teeth began tingling. Whoa, my teeth? What was that about? And then my whole body began tingling, but even more brilliant was when he began frigging my clit and brought me to a glorious orgasm. Whilst we were occupied with each other, I could hear the sisters sighing and moaning as they were locked in a passionate snogging embrace and their hands were running all over each other... and... yes, they were frigging each other too. Well, Abi had told me that they did that with each other, so now that Andrew had me to play with, I guess they were okay with doing that in our company. Who am I to criticize? They love each other and they're not into other girls, Sam had told me, and, “We like boys but we don't want the problems that naked snogging with a boyfriend would cause.” And at a nudist park, whilst there were ample opportunities to experiment; they just weren't interested.

Andrew had drifted into sleep, so I rolled over toward the sisters to lend another pair of hands and lips to their caressing and snogging and we became a sensuous threesome till mutual exhaustion ended the session. *Crikey, do I ever love this family!*

~~~~~

I did it. I celebrated my birthday in the park. Yes, wearing the proper suit, the same one I wore fourteen years ago. The suit's somewhat taller now, but not by the amount that I would have preferred (I'm *still* sensitive about my height, despite everyone telling me how pretty I am).

Blimey, the park went all out and made the whole day into multiple events. I think I'm still blushing. The teens arranged for the resort to set up some sports games and called them “Emma's Birthday Suit Games” and they made me compete in *ALL* of them. Now I know the reason I didn't like team sports in high school. I suck. Except at running and swimming! I demanded that they have a naked five kilometer race and that the kids had to run it with me. They did, and a number of adults ran too. Some of them were military, too. Uh oh, now that's some serious competition. Well, I didn't come in first, but I did beat every other kid eighteen years old and under! My time was 18:47, according to the guy timing it on his iPad. People were flabbergasted. I thought I was damned good too. And I won a fair number of the swimming races too. I'm small and sleek with long, strong legs. I do quite well in the water, thank you. And after dinner, with birthday cake for dessert, they had a real party with dancing. So nice; it felt like the whole place was family.

It was when we got back to the cabin that I learnt that Andrew and the girls had apparently organized a special birthday present for me. I found out about it when we got into our bedroom. Andrew just picked me up and deposited me on the bed on my back and climbed over me and started kissing me.

We mashed our lips and tongues together for several seconds before he broke off the kiss.

“The girls and I have a special birthday gift for you, my darling,” he said as the sisters bounced onto the bed, one on each side of me.

“What are you... ooohh...mmmmffff!”

I couldn't finish because Sam had leant in and began kissing me, using her tongue, whilst Abi slurped my nearest nipple into her mouth and started licking, nibbling, and sucking on it, sending firebolts straight to my fanny. And my fanny? Andrew was down there now; he had grabbed my legs and had them spread wide; now he leant in there and began to rapidly flick his tongue across my clit, sending all my senses into orbit. He licked and sucked all over my vulva, lashing my clit with his tongue and running his fingers up and down between my fanny lips.

I was losing control; sensations were bombarding me from all sides. I could barely catch my breath; Sam's kisses were so intense. And later the girls told me that I was babbling nonsense as the three of them played with my body.

Andrew kept working at my fanny. He sucked on my clit for a few seconds more and then switched to nibbling at my lips and suddenly, gripping them with his teeth, he pulled up on the flesh slightly and then released it. Blimey, I saw stars explode!

Then he pulled my lower lips apart with his fingers, exposing my vagina, and whispered, “Your cherry's gone?”

I came down from heaven and tried to control my breathing.

“...huh...huh... bicycle fall... men's ... bike... huh... aahhh... hit cross tube... tore it... then tampons opened it more... aahhhh...”

Andrew grunted and then pushed his tongue into the opening of my vagina, licked around it some, and then went back to sucking my fanny lips again. Meanwhile, Sam had left off trying to get her tongue down my throat; she moved to my other, vacant, boobie and began working on it. The two sisters feasting on my boobies and nippas and Andrew working on my fanny was driving me right crazy.

Suddenly I felt a strange fullness ... Andrew had put a finger into my vagina! I must've still had a bit of hymen left there because I felt a momentary pinching sensation and then it was gone. From the tingling waves of sensation, he was still flicking my clit with the tip of his tongue whilst he slowly moved that finger in me, in and out, and his palm was pressed into my vulva, jiggling me there. I also think I felt hands and fingers sliding up and down my lips and all that stroking and licking was driving me insane. How many hands does that bloke have, anyway? Then it felt like his mouth mashed hard into me as he wormed the tip of his tongue around the sides of my clit and began rubbing the flat part of his tongue over the area. He pressed his lips tightly against my clit hood and began to suck on it whilst flicking his tongue over the flesh.

If I saw stars before, I was now seeing fireworks; all the sensations created by the three of them were bombarding me from all sides—especially Andrew; he was playing me like a musical instrument. That thought had flashed into my mind when suddenly I felt him start humming on my clit! The vibrations from his humming started an overwhelming feeling rising in my core which began rushing over my whole body. Then suddenly, Andrew pressed that finger in my vagina upwards and began rubbing circles on something inside there that ignited my whole body as his teeth nipped at my clit and squeezed it! I screeched and nearly crushed his head as my thighs clamped shut. My entire body pulsed in the hugest tidal wave of an orgasm ever, a nuclear explosion that just radiated out from my fanny and went on and on in waves and waves of excruciating pleasure that just never stopped. I think I

passed out, 'cause next thing I knew, three concerned faces were hovering above my face.

“Emma darling... sweetheart... are you with us now?”

Faces began to become recognizable. People I knew? Oh! Yes! Yes, I know them. That's ... erm... Sam. And Abi. And Andrew... oh... why is his face all wet? I reached up to stroke it.

“It's wet?” I wondered.

Andrew grabbed my hand, kissed it, and chuckled. “That was an epic cum, darling. Yes, I'm wet. Looks like you squirt.”

*I ... what?*

“Squirt? Oh god, did I pee on you? Oh shit.” I was so embarrassed.

“No, no, not pee. Some very sensuous girls, when they cum, they eject some lubricating fluids from their fannies. I had just tickled where I think your g-spot is and nibbled on your clit and you totally erupted. You came so hard that you passed out and your fanny squirted into my face. Shit, more came out after you squirted and the bed under you is a little wet down there; it kept oozing out until your orgasm stopped pulsing. Jeez, your entire body went into spasms!”

I wiggled my arse. Yep, feels damp. Abi ran out and bounced back with one of our big fluffy pool towels.

“Stick this under there, Emma,” she said as she flopped down next to me.

I did, and suddenly felt completely exhausted. I lay back and felt myself become enveloped by several warm loving bodies snuggling close and consciousness slipped away to be replaced with some amazing dreams.

## Chapter 11

At the end of our third week at the resort, there was an invasion. Really. It started when these four blokes came to our entry gate and demanded to be admitted, claiming they were federal officers. Over the gate intercom, the office manager asked for proof of their identity and the purpose of the visit, but they wouldn't say, so the manager told them they'd need a search warrant to enter the grounds. That's when the fuss started 'cause the berks climbed over the resort's fence and came onto the grounds. I was in the pool when I saw some clothed blokes come running past the pool shower block whilst asking people they passed for me! Asking where I was!

As those blokes ran past outside the pool fence, going towards the sports pitch, I saw that they had Tasers on their belts like the enforcers had back in Fairbanks, so I assumed that must be who these berks were—Program enforcers, and what the bloody hell were they doing here? I watched as they ran toward the volleyball court where a whole gang of teens were playing. They stopped the game and were questioning the kids, especially the girls. Andrew was with me, so I told him that those arseholes were Program people looking to kidnap me and that he had told me he'd protect me when I agreed to come here (I was only half kidding; my seeing them appear so suddenly scared me).

“Please get help now!” I whisper-shouted at him.

Whilst I huddled in the pool with a few other teens, hiding as best we could against a deep-end wall, Andrew jumped out and got some help—and some resort members, who had already been alerted about the intruders, quickly sprang into action. The enforcers had finished at the volleyball court and were now just coming onto the pool deck when the cavalry arrived: Stuart, a guy named Jason, whom I knew was a sheriff's deputy, a sergeant actually, Randy the fullback, and several other big blokes, whom I recognized as part of the resort's unofficial security team. They were all nude, facing these clots with Tasers. What happened next was epic. We all watched, peeking over the pool's coping.

Jason identified himself as a sheriff's deputy, “I'm off duty but you're trespassing and if you don't move to get off the grounds in sixty seconds, you're gonna be arrested.”

Clot: “We're federal agents and we're looking for a teen named Emma Clarke. We know she's here.”

Jason: “Where's your warrant?”

Clot: “We don't need warrants. We're federal Program enforcers and have the authority to take minors into custody.”

Jason: “Not in Maryland, you don't. You need a warrant. The sixty seconds starts now.”

Clot, pulling his Taser: “You don't have much protection from this. If I shoot, it'll hurt.”

That's when three of the good guys yanked the sun-shade umbrellas out of their stands and, using them as shields, advanced on the enforcers, two of whom let fly their darts, which the umbrellas blocked handily. Being surrounded, the enforcers were subdued very quickly. Stuart was awesome; he did some fancy wicked kung-fu thing with his legs and took two of the clots down. Yay, Royal Marines! Randy did a nasty football tackle on another clot (Andrew assured me that it was an extremely illegal tackle) and gave him a spot of pounding in the process. No bones were broken. Probably. Jason took the spokesman clot down in a move too quick for the eyes, putting him face down on the pool deck with an arm in a hammerlock.

Oh, those Tasers were never gonna be used again. One of the resort blokes pulled the wires out of the unfired ones, then clobbered all of the ugly things into pulp using a leg of a table as a hammer. Jeez, that crunching sound they made was ace. So sorry if you clots have to pay for them.

After the enforcer clots were trussed up with the Taser wires—that must have hurt—Jason started questioning them. The Office of Social Awareness had sent them, the spokesman clot said. His mouth was running so fast the words were tripping over each other. Maybe because he was face down on the concrete deck with Jason kneeling on his kidney and still applying his enthusiastic hammerlock.

“The national office got phone calls from some high school Program coordinators. We were told that somebody’s been agitating against the Program. The coordinators told National that a bunch of parents were given instructions about how their kids could refuse to participate. Doing that’s against the rules. Some of those parents phoned their kids’ schools and others wrote letters, telling the school officials that they know that their child can’t be forced to participate in the Program. A few of the parents told the high schools that they heard about how the Program had gotten stopped in a school in Alaska and that all the students had refused to cooperate there, so National checked Alaska school Program records and found that an Emma Clarke was named as an instigator for the resistance—plus she’s also in the database as a non-compliant participant. Our tech people checked with cell phone companies and located her phone; we tracked it here.”

*They can do that? Shit.*

“We were sent to pick her up. We have federal authority to do that. You gotta release us; you can’t hold us,” he finished.

Jason let out a nasty laugh. “Release? In your dreams. That’s not happening. I’m also thinking that this looks very much like an attempted kidnapping. You people have zero law enforcement authority in this state and any authority you possess to ‘pick up’ a child is restricted to a school while the school is in session. If you claim something happened in another state, my state requires an arrest warrant for a felony in order to begin extradition procedures. So your attempt here is actually a kidnapping. But we’ll go easy on you... Me, I won’t arrest and charge you. I think that we’ll do something better. You guys like making kids get naked? We’ll show you all exactly what that feels like.”

They hauled the four up onto their feet—and then noticed that they all had handcuff pouches on their belts, so they replaced the makeshift Taser wire restraints with the cuffs. Then they were frog-marched away. I found out what happened to them later from Jason.

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Jason rang up his post, he told me later, and got two of his detective friends from there to come to the park. He got dressed and took a couple of other resort blokes—one of them was a Marine gunnery sergeant from Annapolis Naval Academy, a personal combat instructor—with him, and the detectives, and the handcuffed enforcers. Together, they all went in a caravan of vehicles—two panel lorries, two SUVs, and the enforcers’ two vehicles—to a Wal-Mart just outside Annapolis, and stopped at a light pole near one of the car park entrances. Here they circled the vehicles around the light pole to block the view of what they were going to do; no other cars were parked nearby.

Two of the enforcers had tried to put up a struggle when they were dragged out of the lorry that they had been stuffed into, so the Marine had used a combat move on each of them, something Jason told me was called a suprascapular strike, stunning them long enough that they presented no further difficulty; seeing that, the other two berks were much more cooperative. They stripped the enforcers out of their clothes and handcuffed them together in a daisy chain around the light pole, facing outward. Jason told me that it only took less than a minute to get them cuffed together around the pole like that. Then they filled the keyholes in the cuffs with fast-setting superglue. Using some short lengths of rope, they secured the handcuffs to the pole high enough so the berks had to remain standing. They stuffed the enforcers’ clothing into the boots of their own cars, piled back into the vehicles, and took off.

They hid the enforcers' cars by parking them amongst all the other cars in the Wal-Mart car park, and dropped the keys in the boots with the clothes. Then Jason called the local police to tell them about the naked men at the Wal-Mart and not to hurry in releasing the four. He explained how they had trespassed at the park in an abortive attempt to pick up a teen for their "protective custody" but in reality it was technically an attempted kidnapping.

I asked Jason if anybody could get into trouble over this.

He told me, "Well, Emma, look at what happened. First, they were trespassing. Even if they were sworn law-enforcement officers, which they're not, they couldn't legally enter a private gated property without a warrant. Officers can't enter private premises without permission or a warrant unless we have a reasonable knowledge of a crime in progress or that someone's life is in danger. We can't just go in somewhere private and hunt for someone like that. Next, they'd need to admit that they were taken out by a few nude guys, with them being armed."

I giggled.

"Yeah. Next, except maybe for me, they don't know who anyone else was. Topping it off, there's the kidnapping. Enforcers don't have arrest powers but they can, under the doctrine that the school is the in loco parentis guardian of a child while at school, do what they call 'protective custody' but technically that's only for children who are causing a disturbance and while in school. I've heard that they claim that a kid refusing to participate is 'causing a disturbance' but I seriously doubt a judge would agree with that reasoning. Besides all that, you're not enrolled in any school in Maryland and there's no Program running anywhere in the summer, so they totally lack any jurisdiction over you. And you heard what I told them about their claim involving another state. No, my dear, no one will get in trouble over this—except perhaps them."

What was totally brill about the incident's outcome was the spectacle of those berks cuffed together naked around the light pole in the Wal-Mart car park. The four were shown on the evening TV news and as well, their pictures got in the papers. The local cops took their time finding someone to cut those handcuffs off, too. Also brill was that when the county prosecutor heard what had happened, he began an attempted kidnapping investigation and the press went to town with that story. They did have to face trial for attempted kidnapping—that came a year later, and during the trial they plea-bargained the charges down to conspiracy for false imprisonment and they all wound up with a one-year sentence.

I guess I'm batting a thousand on Emma versus the enforcers. Jeez, another baseball metaphor committed...

What wasn't brill was when, during the following week, in I suppose what was another retaliation, a Maryland Child Protective Services investigator turned up at the park, asking for admittance. She too was asked for a warrant. She said she was simply investigating a complaint involving me, but was told that she'd need a court-issued warrant to enter the grounds and was sent away. Looks like those damn Program arseholes won't give up harassing me.

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Whilst I was staying at the park, I had kept up a correspondence with my Johns Hopkins contact, Dr Larry Wilson. I would be offered some space in their Applied Physics Lab, he told me, and access to the facilities I needed and an appointment as a "visiting assistant professor." I had previously told him that I could fund my own work, at least the theoretical parts, but eventually there would be some lab work needed for some fabricating to test my ideas. As well, I had asked him about teaching opportunities, so he was still working on that. He said they wanted me to teach at the advanced level,

like graduate seminar. I told him that I would do that, but I wanted to hold out for a more basic course first.

I also was in touch with my engineering school boffins at UAF and learnt that my idea of etching tiny channels in the sandwiched silicon wafer, which would hold captive my substrate recipe, worked and that method could be used in fabricating superconducting microchips which could run small devices on a tiny power source for, well, forever. They had a paper in preparation with me named as senior author and would send the first draft to me by email soon.

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The end of the month arrived and it was back to textile life. When Stuart and family (and I) got back to their home, after just an hour of being back, it felt like I had never been away. But when it was time to go to bed, that's when reality truly hit. This was bloody awful... I was so lonesome. After about a half hour of tossing and turning, trying to get comfortable with no success, I heard the pad of feet as someone tiptoed into the room.

"Emma? You awake?" Abi whispered.

"Yeah. Can't sleep."

She giggled. "Me too. Want company?"

"Yep." I moved over and she climbed in. She was nude.

"Why you wearin' clothes?" she mumbled.

"Erm... habit? Not at the park, so..."

"Emma, just ditch 'em."

This cuddling was feeling much better naked when...

"You guys? I'm bloody lonesome..." Sam was stood at my bedside, tugging my blanket.

"Climb in, Sam, it's good to have you here too." I giggled.

About two minutes later, ohmygod... I heard, "Is there any room in there for me?" Andrew asked uncertainly. "I frikkin' can't sleep."

Fortunately my bed is queen-sized. Guest room, you know.

"Sure. Pile on in, sweetheart." I made some room.

He wiggled next to me and, "You're nude..."

I giggled. "You told me that 'naked' is appropriate in this situation."

"So I did, sweetheart. Let me join you in nakedness."

*Oh heavens, this cuddling is so brilliant...*

That's how Gerry found us in the morning, a bunch of naked bodies all mooshed together like a litter of kittens.

"Okay kids, what's up here?" she demanded.

"Ooofff... wha?"

"Lonesome..."

“Couldn’t sleep...”

“Needed my sis...”

Don’t know who said what, though.

“Alright. I know that you all were super-close for the last month but...”

Four pairs of sad puppy-dog eyes looked pleadingly back at her.

“Okay, okay, I give up. But if you do sleep like this, there need to be some ground rules.”

She enumerated them. “You must make absolutely sure that no one finds out what you do here and that any sexual escapades are strictly forbidden. And sleeping together is only for when you don’t have school the following day unless you get advance permission.”

Wow, not bad. We could deal with those rules.

“All right, now Gramps and Grandmum are coming over for lunch. We still have lots of things to put away, so everyone up now and let’s get going. Breakfast is ready so don’t be a dilly-dally.”

It took way longer to get everything put away than when we got it together in packing for the month’s stay at the resort. Is this a kind of undiscovered form of time expansion that needs some new physics to describe? No, this isn’t relativity; it’s maths. Packing time as compared to unpacking time must simply be a non-commutative relationship, just as  $a \div b$  doesn’t give the same result as  $b \div a$ . Hmm... how can I express this using maths? Let’s designate the number of pre-trip particles... erm... items to be packed as “a” and those to be unpacked as “b.” Now assuming that there haven’t been any acquisition trips to obtain items “c” (that is, by shopping), we can safely assert that “a” equals “b.” Since the transit distance needed to carry each item in packing the car and unpacking it is the same in both cases, we can safely ignore that variable. If the time to pack “a” items is expressed as “ $t_a$ ,” and unpack “b” items as “ $t_b$ ,” we would expect that  $a \cdot t_a$  should equal  $b \cdot t_b$ . That would be sort of a commutative relationship, but since they are unequal, it’s non-commutative. But wait, this method doesn’t account for food items which were packed and subsequently consumed...

Jeez. There I go *again*; I’m *still* doin’ it. Must mean that I’m gaggin’ to get back to my research if I keep seeing mathematics in whatever I’m friggin’ doing.

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The Marshalls senior arrived just before noon and got an enthusiastic welcome from everyone. They remarked at how nice and rested—and tanned—we all were. Uncle George wanted to talk to Stuart for a while about some embassy business, so Isabella and Gerry invited me to chat with them about my plans.

Isabella asked, “Emma, have you given any thought to where you’ll be in a year and in five years?”

“Yes, ma’am, quite a bit. I have several projects going on in Alaska where I’m kinda the lead investigator and I’m managing that project remotely, and I’m being appointed as a visiting assistant professor at Johns Hopkins in a week and will have a lab at their APL. I’ll need to manage both of those operations to see how to bring them under the same roof. That’s for the first year and...”

Isabella laughed. “Goodness gracious. That wasn’t what I meant at all, dear.”

I was confused and looked at her uncertainly.

Gerry chuckled. “Mom, that’s Emma. She operates on a whole different plane from us ordinary mortals. *I* knew what you were asking. Let me paraphrase it. Emma, you’re living with us now and we

totally and absolutely love your being here, and the kids are over the moon with you living with us. So don't take this as a suggestion that you're not wanted here. Mom was asking how you view your short and long-range personal situation, including your living plans. For example, do you want to live with Scott... and Mary... instead?"

"Oh. Ohhh... erm, well, no, I don't, actually." I felt a tear form. "You blokes are much more of a family than Scott ever was or could be."

Gerry drew me into a hug. "Well, you do feel like a third daughter to me... in a way, but your maturity makes me feel like you're more like a little sister to me than a daughter."

Isabella was looking a bit damp about the eyes herself now.

So I went over to her and hugged her. "Are you my honorary sis-mum-in-law, then? Is that even a relation?"

She laughed and hugged me back. "How is it when I look at you, you're a beautiful, sweet teenager girl, but when I close my eyes and talk to you, you become at least twice as old?" she asked wonderingly.

I blushed. There just aren't any answers for those rhetorical questions. But I could answer the one still on the table.

"So my personal plans are kinda in flux. Short-term? Andrew and I have been talking about his future school plans, actually. He's just about a maths whiz, almost at my level in what he knows, up to college level, that is—maybe college junior maths, I'm guessing. So I've been coaching him. Also I'm showing him how knowledge of maths really helps in physics and chem, too. And of course in engineering. He's a junior now. He needs to organize for those college placement tests first before he decides on a major in uni. So I was assuming I could stay here... I suppose that was rather presumptuous of me..."

Gerry interrupted, "Never think that. You're part of the family and that's final."

"Thanks," I blushed. "So I was thinking that I could help Andrew—I discovered that I'm excellent in coaching kids. I don't really tutor; that implies drilling them in a subject so they can pass tests. I prefer coaching which brings out kids' strengths and makes them self-confident in their abilities. To be self-reliant in study habits."

Both women were looking at me with a strange expression now. No, it couldn't be awe. Could it?

Isabella sighed. "Gerry, I apologize. I thought you were exaggerating about Emma. Emma, I'm in awe at your... grasp of ... goodness ... it seems everything you do."

Gerry smiled at me. "Andrew's talked to me about how you make him feel after one of your erm... 'coaching' sessions. He said he feels like the most important person in the world, even after seeing everything he works on—you've insisted that you even want to review his mistakes. You told him that looking at those was useful to do, as well."

I nodded. "Yes, absolutely, even the errors have value. In science, the errors sometimes tell you more about the system you're trying to solve than the things that do work. So I tell my students not to be afraid of them but to work out why they made them. That way they learn how to think critically to avoid making similar errors in the future. Anything a student says, if it's on point, has value, and teachers frequently learn from their students too. It's why I love teaching. I get fresh, untainted viewpoints."

They both wanted hugs again. I could get addicted to this display of love.

I went on. “More short term ideas. As well, I’d love to help Sam and Abi. Sam’s not interested in maths or science but she has a quick mind. She’s observant and analytical. She’d be good taking a general program in college that could lead to any non-science field; she has skills that could make her successful in many areas. I’d like to coach her in developing her innate skills by showing how she can use them in her school learning.”

They both nodded.

“And Abi is the opposite; she’s good in maths like Andrew but I’m sure she must skive off her other subjects, judging how she talks about school. I could help her too. So if I live with you, at least for a year or so, I could work with ... with... my adopted siblings.”

I was getting teary again. More hugs reassured me.

“For a longer term picture, I don’t know. Even when I turn sixteen, I wouldn’t want to live in an apartment or house on my tod. And I don’t know how long Stuart can remain posted here.”

Gerry smiled. “We’ll be here for a while; this begins the second year of a five-year posting and I’m sure that Stuart will be separating from the Marines after that and there are plans for him to remain on as a deputy chief of mission here when he does retire. He’s got some special skills in applying military thinking to diplomatic problems. That’s what the men are discussing now, actually.”

“Oh, okay,” I said. “And... erm... another thing. I need to tell you... erm... that I think that I’m falling in love with Andrew. I know what one kind of love is... I feel it from everyone here, but I feel something different with Andrew. Softer but more intense somehow. More focused. Comfortable. I’m still very young, much too young for commitments, but I’d like to give our relationship a chance to see where it goes.”

“What an incredibly mature way of putting that, Emma. I think Gerry would agree.”

Gerry nodded, “Totally. And I’m sure Andrew feels the same way. I see how he looks at you, Emma.”

What could we do but hug each other again?

We continued chatting for perhaps ten minutes longer and then the men joined us.

“You all look very comfortable,” Uncle George commented. “I trust your discussion was satisfactory?” he asked Isabella.

Oh god, it was a setup. I hope I passed.

“It was perfect, dear,” she answered with a very self-satisfied look. “All questions answered.”

Uncle George went on. “Emma, I have good news for you now. You’re an emancipated teen as of ... well, two and a half weeks ago, actually.”

I was gobsmacked. “Whaaat? How did that happen? You said there’d be a hearing, I’d have to go before a judge, and...”

He laughed. “Details, details. Just arranged it a bit differently. Highly unorthodox, yes, very much so. But fully legal. You did go before a judge. Mr Carruthers, the judge, actually, is a family court judge in this county. You remember speaking to him, I’m guessing?”

“Oh. Yes. Beginning of August, around then. He was terribly curious about me, it seemed, and I had thought his questioning might be a bit rude, actually. Andrew said nudists were private but he was quite prying. But he was so nice, thoughtful, and reassuring, and I knew he was a judge, so I didn’t mind.”

Uncle George nodded. “That was your hearing, then. Since there was no adversary, no court appearance was necessary, was it. Your guardian concurred. You meet all the criteria for independent support, have stable housing, et cetera. The judge simply wanted to confirm your maturity and ability to be independent. You totally impressed him, actually. So instead of being conducted in chambers, he did it at the resort, and he recorded the session too. And you may ask how we knew him? He’s the father of one of Stuart’s friends at the resort and goes there sometimes when he can get away. So that made it easy to have him see you. Otherwise we could have simply gotten onto a judge’s calendar and had a regular hearing, with the same result.”

“Oh... oh my... so I don’t need to do anything else? It’s done?”

I was trying to adjust to this new reality. I still felt the same, after all.

“All done. I have copies of your official declaration of emancipation right here, and the effective date is 15<sup>th</sup> August.”

I sat down on the chair—no, dropped onto the chair. This was... well, I don’t know what I expected. Funny, for a normal kid, they become adults gradually. Well, they reach their majority in a day-by-day progression. Me, I did it in one single blow. No buildup, no easing into it. No wonder I felt so weird about it.

“Are you all right?” Gerry asked, crouching beside me.

“Yeah, I am. Just a lot all at once.”

I got up and hugged Uncle George. “Thanks for everything.”

He smiled and hugged me back.

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I went to visit Uncle Scott on the Sunday; we had spoken by phone during my month at the resort but it was ace to see him again. His surgery was healing well and the swelling in the area was almost gone. He had good sensory responses throughout his body and his motor responses were progressing well. I could tell he was feeling better ‘cause his ornery personality was making a reappearance. How did Mary take this new Scott? Damn, she thought it was cute, and could always make him back down and laugh at himself if he got too intense. It was a good match, those two. They were getting him ready to move to a rehab facility right on the hospital grounds so I guess the medical staff felt his recovery was going smoothly.

I told him about the emancipation going through; he had already been told about that and in some way he appeared to be relieved about it.

“And Uncle Scott... your £50,000 stipend? It’s permanent. I arranged that with the trust so you’ll have that for life, with inflationary increases.”

He got tears in his eyes.

“You’re a great gal, Emma. Your mum and dad would be so proud of you. Look at all your accomplishments.”

We hugged, then I hugged Mary and told her to keep taking good care of Scott.

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Well, damned if that CPS woman didn’t track me down at the Marshalls’ home, and this time she had a warrant. Gerry answered the door but made her wait outside until she checked with the embassy, a

legal officer there, who said she should let the woman in; that would prevent any additional official problems with the authorities.

She demanded to see me but I was out with the girls doing Competitive Shopping, Act 2, School Shopping: Clothes. Even nudists need clothes under certain situations—like Real Life, and the girls' clothes have to be *stylish*! And crikey, if they didn't school *me* in proper clothes selection techniques. Up to now, my clothes selection was, well, meh; if it fit and wasn't naff, I bought it. Okay, now I actually do need some decent go-to-work clothes to go along with the nice suit I had worn for my seminars.

Meanwhile, back at home, the CPS woman told Gerry that since I was not in school—she had checked all the area schools—that I was in violation of the state's truancy laws. I had to stay in school until I was 16 years old. She wanted to talk to my legal guardian; the county had no record of one, so probably she would have to remove me from their home since I wasn't being properly supervised. That's when Gerry produced my emancipation document for her and pointed out that CPS had no jurisdiction over a legal adult. So the woman called her office and there was some discussion over how it couldn't be real since I was younger than 16 years old.

I arrived home right about at the point where Gerry was getting ready to throw her out.

"Who's this, then?" I asked Gerry as I came in with the girls.

We had taken a Uber back from the local mall.

"From Maryland CPS," Gerry gritted. "She's just leaving."

"Wait," the woman said. "Is that Emma?"

"I'm Emma. Are you here to check on my living conditions, that guardian rot, and all?"

I noticed Gerry waving the declaration doc behind the woman.

"Yes and I need to talk to you now."

"No you don't and I certainly will not talk to you. I think your being here is a put-up job with those Office of Social Awareness berks to harass me. I've graduated both high school and college and have a court decree that I'm a legal adult and you have no authority here; you saw the paper. Even if you have a warrant, it's invalid. If you don't leave here *this very instant*, I'll call the police and have you charged with trespassing. There's the door. *Now get out!*"

She stomped out but sat in her car and I saw her making a call. Next thing we knew, a police officer was knocking on the door. I told Gerry I'd handle it. I did *not* ask him in—I went outside. This was between me and him; if I let him in, I assumed that would involve the Marshall family and I didn't want that to happen.

"Okay sir, can I help you?" I asked.

"Why didn't you let me in? There's a complaint of refusing to honor a CPS warrant."

"Us being outside? The CPS issue is solely about me and the people in this home have nothing to do with my status. That warrant is invalid since I'm a legal adult. Here's a copy of the emancipation declaration."

I displayed the document.

"That CPS woman sat in her car over there doesn't think this document is real, despite the official seals. I assure you it is real. If she, or you, want to check its validity, then contact Judge Carruthers at

this courthouse—oh, it’s the county courthouse. He’ll confirm it.”

He wanted the copy but this was the original—no way was I giving that up—so I told him to get one of his own at the courthouse. Then I turned around and went back inside. The officer shook his head and went to the woman’s car, spoke to her, and soon they both drove away.

The girls were goggle-eyed at what they saw whilst Gerry was stifling a laugh.

“Emma, if that’s what you’re like when you go into action, now I can see how you handled the problems you had at your high school.”

“I’ve had practice dealing with prats like that woman. And if you act strong and decisive, it works on police too if they think that they’re in a mess they’d rather skive off. I could tell he really didn’t want to deal with this one, so it was easy putting him off.”

“As I said, Emma. Impressive.”

Hey, for once I had made the girls speechless. That was truly a first. But I had to make up to them ‘cause they looked like they were gonna give me the evil eye, like I had become an ogre or something. So I turned it into another lesson and explained how standing up for oneself was a very important ability in life—never let anyone push you around.

Speaking of standing up for oneself, Sam was 14 now and a freshman; Andrew was a junior. And the Program had indeed started in their school. And finally and probably unbelievably, she was selected for the Program when it began at the special school assembly on the Monday of their second school week. Coincidences like that only happen in stories, I know, their being included as devices to further the plot. Not here, however; she was undoubtedly chosen in retaliation because she had been widely seen during the school’s first week telling everyone in sight that they could refuse to strip if they got selected.

When her name was called as the first one of the freshman participants, she wasn’t surprised, well, just a little, because she thought her exemption as a British citizen would be honored. The school had been notified of that fact; a letter from the U.S. State Department had been sent which clearly stated that under the diplomatic agreements between the U.K. and the U.S., her being exempt was required. Also, Gerry had sent the school several documents which detailed Sam’s and Andrew’s diplomatic family status. She had also sent in the Program exemption forms for Sam and Andrew, but, at least in Sam’s case, the State Department letter, both her exemption form, with her diplomatic identification and a copy of her A-2 (diplomatic) visa, obviously had been ignored. But Sam had remembered our discussions about being self-reliant and stood up for herself.

Sam stood up. She stood up in the auditorium when her name was called; she walked to the stage steps; and then stood up, right there next to the steps going up to the stage, where she told each selected kid as they passed by her of their right to refuse to strip and that they couldn’t be forced. That forcing them to strip was a felony. I heard the whole story from her later that day.

I was home that morning, organizing to ring up my team at UAF when they would get in for the day, to discuss the draft of the paper that they had emailed to me, when the house phone rang. I looked at the caller ID; it was Andrew’s school calling. I let it go to voice mail and then texted Andrew and Sam.

*“School rang here. All ok?”*

Got responses, first from Andrew about two minutes later.

*“All ok. Sam picked. Refused. Whole school saw. She’s brill. I’m in class, can’t talk more. Cya”*

Five minutes later, from Sam.

*“Pgm picked me, lol, a blast. Froze em out like u.”*

When Gerry got home and I told her that Sam had been put in the Program, she was livid.

“Grrr. Gonna tear them a strip off their arses...”

“Wait. She refused and she’s okay. She sent me a text and it looks like she’s enjoying herself. Oh, there’s a message from the school in voice mail, probably about what she must have done.”

She played it on speaker.

*“Mr or Mrs Marshall, this is Principal Jessup. Your daughter Samantha was terribly disruptive in school today. Please call me so that we can arrange a meeting to discuss her behavior and the punishment I will propose. Thank you.”*

Gerry rang Stuart and told his voice mail that he should be home when Sam got home, that Sam had been picked for the Program but all was under control.

Then, when Sam and Andrew got home later, she told us what had happened.

“I did everything you told us to do, Emma,” she said proudly, doing little hops in her excitement. “I even told all the kids going onto the stage that they could ignore any demand to get starkers.”

Stuart had come in just then.

“You didn’t tell them *not* to do it, right?” Stuart asked. “Damn. They ignored the exemption and her diplomatic status,” he remarked to Gerry. “I’m going to have Dad do a protest letter to the State Department.”

“I didn’t, Dad, Emma told me never to say that they *should* refuse. I just told them that it was their *right* to refuse.”

“Good,” Stuart replied. “How did that go over?”

“Well, in today’s Program assembly, my name was called as a freshman to participate and we were all told to come up to the stage. The principal was on the stage with two women. One was the counselor and the other was a Program official, they call it coordinator or something. Oh, there were two teacher blokes on the stage too. From what Emma told me, she said to watch for that, ‘cause they’d be the ones to do the forcing.

“I got up from my seat and went to the stage steps, but before we all went up onto the stage, I told the other kids about their right not to strip, and then I followed them up. I wasn’t afraid of getting starkers myself, of course. But I wasn’t about to be forced.”

“Bully for you, Sam!” I cheered.

“When I got on the stage, I told the principal when I passed by him about my Brit exemption and he got confused and asked what I meant. I said I was a U.K. citizen; Mum had done the exemption, and the school was sent a letter from the State Department that neither Andrew nor I were to be selected. That caused a lot of glaring looks between the adults—I’ll bet the Program person had ignored my exemption and the principal didn’t know about it—so the principal told the kids in the assembly to wait for a minute while he resolved a question and then he had a rushed, whispered conversation with the Program person.

“Meanwhile, I whispered to the kids I was stood with to tell them again that they could refuse and leave the stage anytime they wanted—I was staying because I wanted to make my case for the whole school to see. Then the principal came over to me where I was stood with the others and he told me

something like, ‘Regardless of any letter from the State Department, since they have no authority to interfere, you still must participate since you were selected. We’ll ask the district’s lawyer to deal with the government issue when she has the chance.’ I was planning that if something like that happened, I’d use it to help me convince everyone else that they could resist too. Emma’s always told us that seeing concrete examples are much more memorable than just talking about them.”

“Crikey, that was perfect, Sam,” I told her. “You made the situation into a setup for you.”

“I guess so. The principal went back to the podium and talked some about our responsibilities, then he went over the Program instructions and the rules in the Program booklet that everyone had gotten, and then turned to us and told everyone to get starkers. That’s when I thought of a cool idea—I’d agree to participate in the Program but insist on keeping all my clothes on!”

We all laughed at that audacious idea.

I chuckled, “Sam, how you came up with that idea is a perfect example of the counterintuitive nature of quantum superpositions but you did it in a real-life situation. You may not appreciate it but Andrew would. I’ll explain it to you blokes later. Pardon my interrupting; please continue.”

Sam gave me “that look” and eye roll that teen girls have mastered so well. Then she went on.

“Okay. So I said in a very loud voice, trying to make sure lots of kids could hear, ‘I will agree to do this stupid Program, but I absolutely refuse to take off any of my clothing ever! I’ll participate while keeping my kit on!’ Then I told them what you, Mum, wrote to the school. I said very loudly, ‘Forcing any one of us kids to get starkers would be a felony for all the adults up here on the stage and a sexual offence involving a minor child has a minimum sentence of twenty years in jail. All you kids, on stage and in the seats, you don’t have to strip and they can’t force you. They can’t even threaten you ‘cause doing that would be doing a sexual assault. Assault is a threatening and battery is touching. I’m not refusing to take part in the Program. I’m just refusing to take off my clothes and everyone here has the right to refuse too.’”

“The principal was trying to stop me from talking to the whole assembly—they couldn’t all hear me but enough kids did, and the sight of him trying to come after me as I kept moving away from him must have looked pretty funny—a slow-motion chase? He stopped doing that after he came at me once because I guess he didn’t want to make it look like he was chasing me around up there,” Sam giggled. “The teacher blokes started for me, but I stared at them and yelled, ‘I guess you wanna go to jail too?’ so they stopped and looked at each other.”

We were enthralled at her story. Gerry told her to continue.

“The other kids up there with me were goggle-eyed at this so I called to them that if they wanted to leave the stage, they could, any time they wanted. Then the principal tried to talk again with, ‘Young lady, you’re wrong...’ but then I interrupted him, again talking loudly, ‘You may try to strip me yourself. Those teachers over there can try too. Does anyone want to take the chance? Just come over here and try. If you do, I’ll fight you; I bet I can give you all kinds of bruises and scratches. Maybe you’ll even get kicked in your bollocks.’ Then I called out, ‘Hey kids! Anyone with a mobile, if they try to strip me, video it, okay?’ Then I told the principal again, ‘It’ll be on video, so when it turns out you’re wrong, you’ll have a lot of time in jail to think about what you did wrong. Or maybe not. I hear that child sex abusers don’t live very long in jail, you know.’”

Gerry looked at her daughter in amazement. “You told them that?”

Andrew interrupted. “She sure did, Mum. She put on a real show. She was brilliant.”

“I said things pretty close to what I just told you, Mum. Emma told me what to do, be strong. So I went

over to the stage steps, and announced again, ‘I’m not refusing to be in the Program. I will do it but I will keep my clothes on. Kids, remember, if any teacher touches you, they’re breaking the law; it’s a felony. Who wants to leave the stage now? ‘Cause I’m leaving.’ I went down and everyone else followed. The principal and the Program person both looked really cross.”

“Anything happen then?” Stuart asked, relaxed now and enjoying his daughter’s tale of her courage and resourcefulness.

“Well, he dismissed the assembly after announcing that everyone should ignore what happened, our parents would be contacted and punishments would be in store, and that the Program was still going to be running in the school. When I got to each class after assembly, the teacher there said I was supposed to be starkers because I was in the Program and didn’t I know that? So I said I was doing a new version of the Program whilst wearing clothes, which made everyone laugh. Then I reminded the class that none of them needed to be in the Program unless they wanted to do it, and nobody could be forced to participate. So I guess I caused an uproar in each class today.”

Gerry laughed. “Yes, the principal called and left a message. He wants to talk to Dad or me.”

“I’m not in trouble, am I then?”

“Not from us, you aren’t,” Stuart said. “And we’ll work out any school problems.”

After Sam’s account of her school adventure, the kids stayed with me and pressed me to explain my interruption.

Andrew asked, “I saw your expression, Emma, so I know your ‘physics’ bug got tweaked. What’s this quantum-super-thing you mentioned?”

“Okay,” I chuckled. “Yeah, it’s sort of farfetched, but Sam mentioned being in two states simultaneously—she said she’d be in the Program, which means she must be naked, but also she said she was staying clothed. That set up a logical impossibility, and that made me think of the analogous situation in physics...”

“Of course it did, Emma,” Andrew sighed. “You always do.”

I stuck my tongue out at him.

“The same kind of seemingly impossible situation—it’s kinda like how the white top Abi’s wearing can also be black at the same time, comes from an interpretation of quantum mechanics that one of its original schools of thought came up with. A system can remain in two opposite states—that’s what ‘superposition’ is—until it’s actually observed—someone looks at it. The physicists who were doing the calculations that developed into quantum mechanics found it weird that their results defied common sense and the one result—of superposition—was totally weird, since it meant that a system could exist in opposite states at the same time—that’s a logical impossibility.

“This idea bothered Erwin Schrödinger, who was one of the developers of quantum mechanics, so he decided to explain this impossibility by using an example from the macro world—the one we live in—since we can’t directly see the effects of quantum events. So he came up with a kind of description of how superposition would work in the world we can see. That’s when he explained his thought experiment which showed how a cat in a sealed box can be alive and dead at the same time.”

“Really?” ... “Eeww!” ... “Killed a cat?”

“No, no; no cats were harmed in the making of his experiment. It was just a thought exercise, but it’s so famous now that it’s called ‘Schrödinger’s cat.’ He imagined a cat in a box with a device which is connected to a quantum event—the decay of a radioactive atom in the box with the cat—and when the

atom decays, it makes the device release poison into the box, killing the cat. The atom has a certain probability of decaying every second, so as the seconds go by and the time that the atom will decay gets closer, the possibility that the decay has occurred increases. Schrödinger pointed out, according to that original interpretation of quantum mechanics, that after a bunch of seconds pass, mathematically the cat is both dead and alive at the same time, as long as you don't take a peek at it. When you do, the superposition state collapses—you see either a dead cat or a live one—and never both."

Abi interrupted. "I still don't get how something could possibly be two entirely different things at once, like you said my top could be both white and black at the same time. Even if I get dressed in the dark and can't see what I'm wearing," she giggled.

I laughed. "You're getting into this nicely, Abi. That's kinda what bothered those physicists back then but now we just do the maths and try not to worry about what they might seem to show. Erm, try this example. It's really not the same kind of maths as we need for quantum mechanics, but it might give you an idea of something strange that maths can show. Here's a quiz. Two plus two. Answer?"

They all looked at me like I was barmy. "Four!" shouted Abi and Sam.

Andrew just shook his head and smirked.

"Good. Two minus two?"

"ZERO!" they all yelled.

"Brilliant. Two divided by two?"

"ONE!"

"Excellent, full marks. Two times two?"

"*FOUR!*"

"Heh. That's correct. Now reverse that. What's the answer?"

Sam shook her head. "Huh? Reverse it?"

Andrew interjected, "Two times two is like two squared. She asked for the square root of four."

Abi looked a bit thoughtful but Sam replied, "Oh! Two!"

I nodded. "Correct. So we're all agreed? Those are the only possible answers for those arithmetic operations? Two plus two is always four, never five or sixteen, and two divided by two is never anything but one, correct?"

They all agreed but very hesitantly. They knew me and sensed I had a card up my sleeve (notwithstanding my short-sleeved top).

"What if I told you that one of those calcs had more than one correct answer?"

Andrew grinned broadly. "Emma, damn, you did it again."

"Who? Me? Whatever could you mean?" I asked innocently.

Andrew laughed. "You suckered us. Square root of four? Two is correct, but it's also negative two. That calc has *two* answers!"

"A-hah!" I cheered. "So that's a concrete, real-world example about how maths can show how something can have two kinda opposite answers at the same time, innit? The answer to the square root question is two different numbers, opposite, and both are correct. That kind of maths has nothing to do

with superposition, like the cat experiment shows, but it gives the idea that maths can show things that aren't totally intuitive. And Andrew knows this; I live in a world where I see maths all around me, so when Sam was telling us her story, I saw her story in terms of maths again.

“So when Sam claimed to be a clothed Program participant, it made me think of her as being both a naked girl and a textile girl at the same time, but any peeking at her—especially staring which is quite rude—isn't allowed 'cause you'd collapse her condition and reveal what she's really like! She'd become Samantha's cat. But no 'pussy' puns, please.”

Then I had to dodge the hail of cushions and pillows and other objects that were slung at me. Fortunately most were soft. Then they all tackled me and started tickling...

## Chapter 12

When the Marshalls met with Principal Jessup, Stuart told me afterward that they had insisted that a school board member and the school's solicitor be present at the meeting. He told me how Gerry went on the attack before the principal even finished greeting them.

"Gerry asked Jessup," Stuart said to me, "how he dared to ignore the State Department letter about Program participation. Jessup said he hadn't been aware of that letter until Sam had mentioned it on the school's stage. So Gerry showed him a copy; it clearly stated that U.K. national students were not to be selected to participate in the Program. The letter was dated in August and with it there was a postal receipt from Sam's school showing it had been delivered. Jessup told us that he had asked the Program person about why she ignored the State Department letter.

"Apparently the Office of Social Awareness thinks that they can ignore international agreements, because from what Jessup said that he was told by the school's Program representative, the U.S. State Department has no authority over the Program. So that's one issue that Dad's going to have to clear up, and right damned quickly too. But I needed to set these gits straight.

"So I asked Jessup to consider what would happen when the monarch of the United Kingdom demanded that the U.S. ambassador attend her and she delivered an official objection to the United States government concerning the government's treatment of her citizens. Our embassy here could easily make that happen, I told him. That's when I took on my Royal Marine persona and gave him a recruit's tongue-lashing: 'Since *you* are the official in charge of this school and not the Program person whom the feds assigned to the school, *you* are the official responsible for ignoring the Program exemption for a British diplomat's child—not that Program woman. As well, you must realize that all of your school district officials would be held accountable, just as you would be. Do you think that your *president* would ignore a continuing international incident that *YOU* precipitated, Mr Jessup? Do you think that the *president* would be somewhat cross with your governor? Do you seriously believe that the federal Program office will overrule the *president*?' Then I asked their solicitor to tell Jessup what would likely happen next, after the president finished admonishing the miscreants in his administration.

"She told Jessup that if such a thing happened, that he would at best be sacked and at worst, never find a position in education anywhere in the country.

"Then Jessup deflated, but told us that this meeting was about Sam's disrupting order in the school, not about any federal requests being ignored. He mentioned how rude she was in speaking to him, threatening to scratch and kick him. He also said that Sam had been inciting the other kids and that was why he couldn't allow her to remain in the school.

"I first responded to his complaint about her being rude, 'Someone tells you that they plan to assault and sexually batter you. Do you stand there and smile and tell them to go right ahead? Or do you tell them what their consequences would be? Sam wasn't being rude; she was giving you a fair warning of how she'd respond to your threat. And how was she inciting the other pupils, then?' I asked. 'She's telling them not to cooperate,' he answered. I disagreed and told him, 'I heard from several other sources that what she told the pupils was that she *herself* was refusing and that others had the *right* to refuse, just as she had. She's not telling them what they should do. Is there any school rule which states that pupils can't exchange truthful information? Because that's all she's done.'

"And I ended with a warning to them. I mentioned that I knew all about the Program enforcers and how they were employed, and warned their school board person and their solicitor that if either of my children were removed from school by any Program official, it would be handled as a kidnapping of a diplomatic official's dependent. That meant that the FBI and U.S. Marshals' office would descend on

the school and arrest everyone involved—the Program official, the entire school board, plus the school’s administrators, would be charged with kidnapping, a class one felony, and I was certain that they wouldn’t want that to happen. That shook them up, I do say.

“The atmosphere in the room was a bit tense, but I did get Jessup to back off from the idea of expelling Sam, especially after I told him how much legal force we could muster against the school district. I asked them if they wanted to take on the legal resources of the British government.”

“So where does this leave Sam now?” I asked.

Stuart answered, “Where she was before, but now the kids think she’s a hero for resisting the way she did. The school district’s solicitor also admitted to us that Sam was correct; if a staff member tried to forcibly strip a student, it *would* be a felony, and she had informed Jessup of that fact after Sam’s assembly when he had contacted her for advice. So all the pupils in her school now know that they can’t be forced to be in the Program, thanks to Sam. I’m impressed at how strongly she stood up to the school officials.”

“Sam’s a courageous girl,” I agreed. “Andrew told me she’s now known as that ‘clothed Program girl.’ Everyone in the school knows her and saw what she did on the school’s stage. She’s been having loads of fun with the idea of a textile Program too, using it to ridicule the whole idea of the Program. She did some wild things, too, until the teachers twigged to her game.”

Stuart laughed. “I won’t ask.”

“I’ll tell, though. In one class, the teacher wanted her starkers for some kind of anatomy demo. She got up and said, ‘It’s fine; I’m wearing my Program outfit now. So demo me, then.’ The class laughed. The teacher said, ‘I can’t show anything with your clothes on.’ So that little imp looked around the room, saw an anatomical model at the back, and went to pick it up. She brought it to him. ‘Here’s your demo. I’ll hold it while you do the demo. I’m totally cooperating, you see.’ The class thought that was brilliant but the teacher was quite cross with her, she told me. He sent her back to her seat.

“Sam feels very strongly about how wrong the Program is. She could have simply taken her exemption and kept quiet. But she told me, when she heard my story of how kids in my school resisted the Program and knew that her own school would be starting it this autumn, that being starkers wouldn’t particularly bother her but she would not abide being forced into it. And that she’d try to make sure everyone knew that.”

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I spent much of the last two weeks of September getting organized at the APL and by early October, I was commuting there daily. Obviously I don’t have a driver’s license—even being emancipated, I still was not eligible for age-related privileges like driving or voting. I considered the various alternatives and then settled on hiring an executive car service. Using them, I could ride in comfort in a limo with a little desk and get some work done. And there was lots of work—not only my research, but I needed to review the work of the UAF engineering team, look over the various patent licensing proposals I was having prepared, and sort through all of the seminar requests I was still receiving.

At my first day at the APL, I had gotten a very warm greeting. And I was impressed by the “space” that they had organized for me—a lovely office and a nearby lab. Both were small but then, so am I, and I wasn’t really sure what I could use the lab for right now; the lab work I had needed to do up to now was actually engineering work and not applied physics. But my new colleagues (that sounds so brill) assured me that I’d come up with something. They did have facilities for doing semiconductor work here, but the equipment was currently fully committed. I wondered if I could raid my old uni, UAF, for people... Well, first I’d need to see if that could be done ethically.

I did have plenty of ideas where I could use my approach to solid-state physics, perhaps investigating quantum communication using the Josephson effect—this area of research has been around maybe 20 years or so, but I have a few ideas that go in a slightly different direction and it was one of the areas of expertise at the APL. Another Josephson application, one that had occurred to me when I first got the superconductivity idea, involved Andreev reflections and electron scattering. This could be useful in studying superconducting mesoscopic systems; this is the scale of the electronics used in integrated circuit chips. Yeah, I had lots of theoretical work to keep me busy; no need for a lab just yet.

And I really do need to see if I can get to teach a basic physics class at the main campus. Yes. Plenty of work.

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It was a Monday in early October. I had spent the day at the lab working on several ideas which were all converging. As my colleagues had predicted, I had gotten an idea which would require some engineering work, so I needed some money for equipment and a technician or two—perhaps a grad student or postdoc. So I had begun to sketch out a quick research grant proposal. I also contacted some physics grad students I had worked with at UAF to learn about their post-graduation plans, and as a fall-back plan, sent an email to my trustee to learn if any royalty or licensing income could be made available as seed money for this idea. I was busy with this preliminary planning all that Monday and Tuesday, so when I got home that evening, I was fairly knackered.

Then after dinner that evening, Gerry wanted to discuss her family's plans for the next few years with me to see how they would fit with my own plans. The Marshalls have been planning to remain in the U.S. after Stuart retires from the Marines. Gerry has a master's degree in adolescent education from a British university and was taking a few classes here in the States to allow her to become licensed to teach here. Stuart holds a doctorate in political science from the London Economics Institute (wow, that's ace. Who knew?) and has a few open offers to teach at several area universities too, and they liked the educational opportunities their kids had here better than in the U.K. I thought with my work at the APL, I could be well served by remaining in the area too, and of course I wanted to be close to Andrew. Gerry and I were discussing my ongoing work with the kids and I told her how Abi was starting to take her work seriously now. I pulled out my mobile to show her some current work that Abi was doing and how clever the girl was; I was determined to get the kid to be serious at her schoolwork. I was ready for bed; the last two days had been busy for me, especially in the lab, so I went to my room to get some sleep.

Too early in the morning, I heard the distinctive ring of my mobile. I fumbled around. Oops, I had left it on the kitchen table upstairs. I looked at the clock. 5:30 frikkin' a.m. *Jeez, who calls at that hour? ... Uh oh, hope it isn't about Uncle Scott...*

Stuart called from upstairs. "Emma? Your mobile..."

"Please get it and answer!"

*Damn, I hope it's not the hospital.*

I ran up the stairs and heard Stuart talking on it as I came into the kitchen.

"...what? A very important call? Who is this?" he said.

"..."

"You're calling from Stockholm? Sweden?" Stuart repeated.

*Ohmygod, it can't be. It can't. There's no way. Impossible.* I grabbed the mobile from him.

“Hello? This is Emma Clarke... erm...”

“Dr Emma Clarke? This is she, correct?” A male voice. Fairly heavy accent.

“Yes sir, and...”

“Dr Clarke, this is Lars Hagenstir, secretary of the Royal Swedish Academy of Sciences. It’s my pleasure and honor to notify you that you have been selected as this year’s Nobel Laureate in Physics.”

My head was spinning. *Is this a hoax?* He had the right kind of accent...

“Dr Clarke?” He was chuckling. “Are you there?”

“Yes. I’m totally stunned.”

“Indeed, I tend to get that kind of reaction. I’m delighted to be the first to offer you my sincere congratulations, Dr Clarke.”

“Erm... is there someone else... a shared prize?”

“The Academy voted for you alone, Doctor. Now, the public announcement will be made at noon here in Stockholm, in about a half hour. Be prepared for the press to descend on you soon after. Staff from the Academy will be in touch with you within a week; the awards ceremony is here in Stockholm on the 10<sup>th</sup> of December. Good bye, and fare well.”

I sat down in shock. How could it happen to me? Only older people get it. How could that happen so fast? I couldn’t recall any other case of a Nobel being awarded so quickly... well no, there was. I recall that in the late 1980s there was a physics Nobel, also for high-temperature superconductivity work, and I think that it was also given something like two years after the work was done. My work is fundamentally different to theirs, and we were able to make a working prototype circuit very quickly. Maybe that’s why this was decided so quickly as well. Still, this is lightning fast...

I realized that Stuart was squatting at my side, trying to get my attention.

“Emma? Emma... are you okay? What was that call? Is everything all right?”

I shook myself... then broke into tears. “I won... the bloody Nobel... am I dreaming? I can’t believe it...”

“What! Stockholm. Early morning call! Of course. They announced the Medicine Prize yesterday. Emma! My God! Hey, Gerry!” he shouted. “Brilliant news! Wake up!”

Gerry came running down and the kids came trundling after her, rubbing their eyes.

There was a cacophony of questions about what had happened. I was still too shocked to speak so I nodded to Stuart.

He put an arm around me, now stood next to my chair. “You heard the mobile ring?”

They nodded. Abi didn’t; she’d sleep through an earthquake.

“Emma just got a call that she’s won the Nobel Prize in Physics. That call came from Stockholm.”

Now I wasn’t the only one in shock. But soon everyone recovered and I was showered with praise and congratulations. Of course we had to ring up Uncle George... heh. Wake him up early too. He was overjoyed with the news. We turned on the TV and at 6 a.m., the news program had the announcement—so did the radio—and the commentators promised interviews when I could be contacted.

Blimey, interviews. Then I realized that the press really didn't know where I was. They possibly could track me through the embassy or UAF, but not for many hours yet. They could try contacting my coauthors but finding their numbers would take time. I decided that if my mobile rang with an unknown number, I'd let it go to voice mail. Friggin' interviews. Maybe I could get advice from my APL colleagues—even hide out there till I was ready to face the press. I was beginning to yearn for my prior anonymity.

We had a mini-celebration until everyone needed to leave. Stuart was gonna be late; he had gotten up early for a breakfast meeting but he rang up the others to explain. They were very understanding.

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My driver picked me up at the regular time and I spent time in thought on the way to the lab. And when I walked into the building, that's when the real pandemonium broke out! It was such a whirlwind that I can't recall very much detail. Everyone was so happy for me and so complimentary. I also learnt that three physics faculty members at JHU, who had stellar international reps, had been contacted by the Nobel Committee over the summer for their input on my work and they had been very supportive—they had attended my seminars. And JHU had four physics prize winners in the past and several of the uni's current faculty members were Nobel laureates too. Who knew? That many in one uni? Glad I decided to sign up here, then.

Dr Wilson stopped by the lab and he put me in touch with two of the current laureates and they told me how they had handled the press when their prize had been publicly announced. That was good information to have.

Someone mentioned that the news reports were talking about how I couldn't be located; no one knew where I lived and my old address in Alaska wasn't valid. I had texted Mrs F about my getting the prize but I hadn't thought to warn her about reporters so she was confused by all the media people coming to her door so early in the morning. Fortunately she put off requests for my contact info, claiming her ignorance. I had also texted my group at UAF and had begun getting congratulatory calls from them just before 1 p.m. They told me that the press was coming there too, trying to locate me, but they wanted my permission to release my contact info. So I told them to wait. I'd see how long I could stay hidden. My colleagues thought it was amusing.

I wasn't about to get any work done today, though, and then got an idea, so I rang up Uncle George. He wasn't available, but Anston was, and was agreeable to act as my press manager for now. He had heard about the Nobel and was, well, you know, very congratulatory—I'll skip repeating this now for each person I met. So at about 1:30, I was back in my car service limo, headed for the embassy. About five minutes later, I got a ring from the APL director; some press people had stopped by there on the chance that someone there might know how to contact me. He was noncommittal about my whereabouts; he was also helping me play the "where's Emma?" game. (Heh heh. There's a *Sesame Street* book named "Where's Elmo?" I had a copy when I was younger. I also had a copy of "Where's Wally?" It's a Brit book and I loved it. I saw copies in a bookstore in the mall recently but you Yanks changed its title to "Where's Waldo?" Why do you blokes have to change everything? Come on, I mean, a *book* title? Need I mention for proof, a certain title change from "Philosopher's Stone" to "Sorcerer's Stone"? Go look it up. Q.E.D.)

At the embassy, I met with Anston and we worked up a press release and I made some notes for my opening statement (the other laureates' advice: keep it really brief; let them ask the questions); then he rang up a few contacts and got a press conference arranged for 6 p.m. that evening. Uncle George dropped into Anston's office and greeted me with, well, you know. And a big hug.

The beginning of the press conference was almost a repeat of the first one. Anston emceed and Uncle

George gave a brief introduction. My comments were a bit more than brief. Once I start talking, I tend to keep going. After greeting the standing-room-only crowd, I noticed several writers who had been at my news conference back in June, so I welcomed them by name and that caused a minor sensation all on its own. Then I addressed two questions which certainly would come up, my age and the speed of receiving the award.

“You can tell I’m quite unlike the typical Nobel laureate,” I said, pausing for effect. “I’m shorter than any of them ... well, for the last hundred years...”

They had been expecting anything but that. After a second’s silence, the place erupted with laughter.

“...yes, Marie Curie was only five feet tall. She won her second prize in 1911; that’s over a hundred years ago. I’ve got her beat by a whole inch and a half.”

More laughter.

“Hey, don’t laugh! Those half inches count too.” I continued over the audience’s laughter. “A little more seriously, yes, I’m terribly young to have been recognized with this honor—for those who might not know, I’m fourteen now...” There were some gasps. “... so that’s an atypical Nobel statistic too. All I can say about how I made my discovery at my tender age is that I understood advanced maths innately when I was younger and found that I could easily apply my maths knowledge to learn about the physical systems I got interested in. And all physical systems follow the rules of mathematics.

“And if anyone asks how I got it so quickly, I guess the Academy likes superconductivity, ‘cause there were awards in 1972, 1987, 2003, and 2016 that were all related to this research area. And the 1987 award, to Bednorz and Müller, came about two years after their own discovery. Mine was about two years as well. Perhaps the Academy awarded it because I produced a working physical device immediately after I did the theoretical work. I got incredibly lucky with coming up with a working device and really owe all that success to my excellent research team at the University of Alaska, Fairbanks. Okay, Anston, questions?”

There was applause and then the questions came. The most interesting ones were these:

Question: “Every Nobel winner gets this question. What were you doing when you heard you had won it?”

Answer: “Easy. Sleeping. I’m too young to live alone so I live with a family—they’re close friends and I kinda adopted them as family ‘cause I’m an orphan—so the dad was up at that hour and my mobile was near him. I heard him saying ‘Stockholm? In Sweden?’ and nearly fainted.”

More laughter at that.

Question: “This is usually the second question asked. Can you describe your reaction when you realized that this was the Nobel Prize phone call?”

Answer: “Of course, total and absolute shock. The award always goes to scientists who have had years of research and have established international credentials and generally have tenured academic positions. I’m a kid who got really curious about what looked like an anomaly in electron flow in Josephson junctions and just had begun to explore that.”

Question: “The Nobel has come so very early in your life—you have your entire professional career ahead of you. This is trite, but what will you do for an encore?”

Laughter.

Answer: “I’m thinking I won’t be another Madam Curie—and erm... John Bardeen who had two

physics awards... someone else won two science Nobels too—and win a second one myself, but I do have a whole slew of ideas related to this work to extend it—I’m working on one of those ideas at the APL right now, in fact. As well, there are a couple of problems I have working notes on. Physics has loads of interesting problems. For sure I won’t run out of things to do.”

More laughter.

Question: “When you first had your idea—about the Josephson junctions you mentioned—and you realized what you had discovered and its potential, did it occur to you that it might win a Nobel?”

Answer: I chuckled. “Actually it wasn’t me. One of my housemates, a grad student in physics, saw what I was working on and she made the prediction. I think I kinda blew her off. The calculations I had done just looked so obvious. And the path from theory to practice is loaded with pitfalls. I said I was lucky; I made a few educated guesses.”

Question: “What do you see are some potential applications of your work?”

Answer: “In the short term, it appears that we now can build chips which use so little power that they can run forever. So maybe watches that never need a new battery? If we can scale this up, then maybe smart phones you rarely have to charge. Longer term, there are pie-in-the-sky ideas like trains that run on magnetic levitation and supercomputers which don’t need refrigeration to work at full speed. There are possibilities in power transmission, motors that run cool... many things. I let the engineers think about those kinds of applications.”

More applause.

Question: “How would you explain what superconductivity is to a layperson?”

Answer: “Hmm. I think a good way to visualize it is by imagining a pipe with water flowing through it. Fill the pipe with a length of screen, like from a window screen, rolled into a loose cylinder and put it in the pipe. Run water through the pipe and the water runs just fine, but you need to up the pressure to overcome the resistance of the screen filling the pipe. The water pressure is the power needed to run the system, the water molecules represent the energy flow mediated by the electrons, and the screen is the atoms of the conductor itself, which resist the water flow. Superconductivity would be kind of like taking the screen out of the pipe, reducing the flow resistance way down, possibly to close to zero. Very, very roughly, that’s an analogous system. Would that help your readers?”

Applause again.

There were quite a few additional questions including several which were personal—like whether I had a boyfriend—come on, has any previous Nobel laureate gotten a question like that?—or how do your colleagues treat you; like a granddaughter? Bloomin’ idiot, asking that one. And I got some questions about my growing up years and the kind of education I had gotten in England. I tried to be kind to those questioners, but still. Then another one: What was it like to be in high school, in an undergrad program, and a doctoral candidate all at the same time? That answer was easy. “Busy.” And another: What will I talk about for my Nobel lecture? “I’m considering ideas.”

Soon the press conference ended and the media left. Uncle George and Anston told me that I had done well; this time no one had shown even a hint of hostility—it had looked to them like every person there was happy for me and impressed at my achievements. But I couldn’t concentrate on what they were telling me—all I could think of was “Oh no! The Nobel lecture!”

Damn; I’m glad that reporter reminded me.

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I shouldn't have worried about any reminders. On the Friday I received an express post containing all kinds of information about what would happen right up to the awards ceremony day, including the details of the things I needed to do. One of those pages contained the instructions for the lecture and it quoted from the Foundation's statutes, "It shall be incumbent on a prizewinner ... to give a lecture on a subject relevant to the work for which the prize has been awarded."

Well, that rule took care of my using the lecture as a sounding board for my ideas about proper teaching in high schools, didn't it. And why certain idiotic social "programs" being imposed on high school students are so bad for education in general.

So I decided to open the lecture by talking about ballroom dancing. That's right, ballroom dancing at the quantum scale. You see, when kids are taught about atoms, they're told that atoms are just like tiny solar systems, with the atom's nucleus in the middle and the electrons orbiting around them like little planets. But that's not at all a correct visualization of the atom—electrons don't work that way, and how they perform their highly organized dance steps is essential to how superconductivity works.

You see, electrons aren't really tiny balls flying around—they collectively exist as a probability field enveloping the atom's nucleus, each electron occupying its own unique region and each doing its unique dance, kind of like a swarm of locusts—you can't see the individuals but you can see—that is, detect—where the whole mass of them are located. None of the insects in a swarm moves in a predictable pattern but unlike locusts, electrons do; each discrete electron (or wave forming the electron) dances in its own, unique choreographical pattern, and the dance steps which each electron follows can be described by that mathematical equation I had used when I set off on my journey to the Nobel Prize, the Schrödinger equation.

That equation tells us where the electrons (probably) are and (probably) how they will interact with other nearby electrons in their own clouds. The idea in superconductivity is to find the right molecular components which will allow the free electrons in your material to "flow"—sort of—with minimal interaction with other nearby electrons (which would interfere with that "flow"). And even though water flow is frequently used as an analogue to visualize electrical flow, they really aren't the same. Each individual water molecule travels in the pipe, starting at the source, and eventually exits at the end, whilst each single electron doesn't really "flow" along its conductor, it *transmits* the electric force in the direction of the decreasing potential—thus the electricity "comes out" where the force is to be applied but the electron which was at the "beginning" is still roughly where it "started" from. Electrons do drift in the current's direction—but quite slowly, actually—whilst the force they transmit moves close to light-speed.

It works sort of like this: Imagine a pipe filled with marbles. Push one in at one end; one pops out at the other. If the pipe is a mile long, the effect seems virtually instantaneous at that remote distance. But each individual marble only moves a bit. Finally, remember that electrons can behave like either particles or waves—how it does depends on how you observe its interactions with its surroundings.

Another analogy: Think of a using a poker to push a log in a fireplace. You push—apply force—on the molecules of the poker's handle. Those poker molecules don't travel down the shaft of the poker to the log and push on the log—they transmit the force you applied on the handle to each successive molecule of the shaft until the molecules touching the log apply your push to the log. This is a highly efficient system—all your force goes into pushing the poker and virtually none is lost in trying to also move the surrounding air to push on the log too. If we could collapse that kind of efficiency to the quantum scale and apply it to transmitting electric forces, this would be very roughly analogous to achieving superconductivity.

Good, I think I have the basis for the intro to my Nobel Lecture. This is sooo inaccurate; trying to

describe quantum events in everyday language is way more difficult than simply showing the maths. For the main part of the lecture, I'll adapt the seminar I gave at the University of Maryland on Cooper pair propagation; after all, that describes my work very concisely.

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Sigh. Home at last. Stockholm—the whole event—was exhausting. There were some highlights, like meeting the king; the banquet was ace and so was meeting the other winners. The best part was their reaction to seeing me, assuming I was a laureate's daughter, and then learning the truth. Even funnier was when I found out that some media blokes had assumed that my age was 41 because, naturally, the age in my bio could not possibly be 14; someone had made a transpositional typo. As a result, some of the articles mentioning me came out with my age wrong. I got copies.

I also learnt a bit about how my Nobel came so quickly. At the banquet, I was introduced to a Swedish bloke who's on the board of directors of my grandpa's company; he's a big-shot financier and is also on my trust committee. It was he who brought me to the Academy's attention. When I had sent my original request for funding for my project to my trustee, he consulted with the trust committee members. That bloke contacted some scientists he knew in Stockholm for their advice, and that's how some members of the Nobel Academy got a copy of my proposal and they followed me closely as I developed the discovery.

Oh, by the way, I'm \$1.2 million richer, too. I have some really good ideas about how to use that money since it looks like it will be pocket change compared to the money which should be coming in from patent licensing arrangements and royalties. I'll be able to fund not only my own research, but also an engineering applications lab too.

Oh yes... who was my "designated adult" for my Stockholm trip? I suppose I could have gone alone, but I never even considered doing that. Isabella's daughter had given birth so she and Uncle George were in London and Stuart was very occupied at the embassy. So I organized Gerry to be my "adult" of choice and I twisted her arm to allow her to take her kids too. They were ecstatic when she agreed and they had a fabulous time, even getting to meet the other winners and speaking informally with them. As a maturing experience for the girls, I couldn't have scripted anything better, 'cause after that trip, their whole attitude toward schoolwork went from a tolerable chore to an "isn't there anything else to work on?" work ethic. Andrew didn't need the push; he was already motivated.

Now that the excitement is over; I can settle into a regular life. Some interesting things happened over the next several years, though.

### *Epilogue*

Several years have passed. Soon after winning the Nobel, I had used some of my trust income to buy two houses right next to each other in the same vicinity to where the Marshalls lived—both houses had pools and were larger than the Marshalls' old house. I convinced them to sell their old one as payment for the one next to mine so now I had my own home; the Marshalls theirs, and the kids had their bedrooms in *both* houses. The yards were adjacent so it was almost like living in one huge house. Our dual-home living arrangement was brilliant and so much fun too. The Marshall kids stayed in my house on weekends. I even put a dome over one of the pools so we could swim in the winter. No cozzies allowed, of course, and the privacy fence around our yards allows us to make the area into our own little nudist park.

The rest of my personal life? Andrew was the one, of course. We married after he was graduated from high school; I was 16 years old. He went to JHU and majored in economics; he loved the idea of going into econometrics and how he could use his maths to work with probabilities and trends in dealing with the political effects of wholesale price fluctuations... or the other way around and... ghaaa... give me nice hard numbers to work with. Not messy ones which fluctuate when a political leader makes a flub in his speech.

Oh, and I grew another few inches, making me, at 18 years old, all of five foot four inches tall ... and that's the average height for adult females too. Yay. And I don't need to measure those half-inches anymore, either—but they're still important!

I got the courses I wanted to teach—I get to teach a basic physics class each year. With my appointment to the regular uni faculty, I got a normal teaching load. Within a year, though, my introductory physics course was one of the most popular classes in the uni; even non-science majors try to get into that class. I love teaching and the students love me, I guess. And as a result, the physics and maths programs at the uni have increased their enrollment of declared majors by almost 10 percent.

With some of the Nobel money and some royalty money, I created four endowed scholarships, one each for a boy and girl to attend JHU and one each to go to Maryland. I have a joint appointment on their faculty as well. I'm not being conceited about the scholarship name, however. True, the scholarships' recipients are called Clarke Scholars (like Rhodes Scholars), but the trustees I appointed to administer the scholarship awards insisted on that name or they wouldn't serve on the scholarship board.

Applying for the scholarships is tough; I wanted students who excelled in maths but who were also well-rounded, so the exam has fairly difficult physics and maths sections plus the requirement to write two essays, one on a social problem in the world and a second one on a question drawn from one of twenty-five influential works of English literature (the list was on our website). Applicants sit for the four-hour exam at designated sites each year and the essay topics are revealed at that time.

One kind-of memorable incident occurred at the press conference where my scholarship program was announced. Sigh. In the future I might take written questions only.

At one point, a questioner began with, "Dr Clarke, I understand that you're a frequent visitor at a nudist resort near Annapolis..." and waited expectantly.

The whole room hushed. I stared at the questioner.

"And your question is...?" I asked mildly.

"Er, well... Um. I..." he stuttered. "That's all."

I looked out at the group. “Next question?”

There was an audible sigh as everyone let go the breath that they were holding. Bloody git, trying to bait me, I guess. Wonder why? Couldn't be those Program berks; they quit bothering me years ago. My non-answer stopped him cold. Okay, it's a bad pun. So what?

Oh, almost forgot. I was awarded the Fields Medal two years after the Nobel Prize. That's the top prize in mathematics and it's awarded every four years. It was for my developing new mathematical techniques for solving problems like Fourier transforms.

My extended family is doing very well; Uncle George and Isabella retired back to the U.K. and Stuart is now a top diplomat at the embassy. Gerry is teaching and the girls are both in college—yep, JHU. Looks like Sam is destined for law school and Abi wants medicine. Scott and Mary are doing very well except that Scott is chafing that he can't get his pilot's license restored.

My professional life is wonderful. My old research group at UAF has pretty much scattered; a few joined my research team here but others got top jobs elsewhere based on their work with my project up there. And I have a twelve-person experimental research and engineering team which I keep quite busy, thank you.

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Since I started my story by talking about what happened when they tried to start the Naked in School Program in my Fairbanks, Alaska high school and we got it frozen out, I suppose I should end it by saying something about what eventually happened to it here in the D.C. area—right in the heart of where the stupid thing began.

The bureaucrats at the Office of Social Awareness were like bulldogs; it seems that they were able to get some political traction and they somehow coerced a few state legislatures to pass laws to allow forcible stripping of reluctant kids without incurring assault or battery charges. So some schools were able to go ahead and force kids; other schools, it seemed, didn't. The key appeared to be in the wording of those statutes: that although coercion and forced stripping would not be considered to be a felonious assault, the “use of ‘excessive’ force” was not permitted, so some schools were reluctant to legally test how much force would be considered “excessive.” The Supreme Court wound up upholding the Program as not being a violation of the right of privacy afforded by the Fifth Amendment; they held that minors didn't have that right; it was limited to adults.

Thus the Program continued to run in the Maryland schools; for Andrew's last two years in high school, he had told me, few juniors and seniors were cooperating by participating and the issue of “not graduating” was being dealt with by most schools by not allowing the nonparticipating students to attend the graduation ceremony and withholding a diploma certificate. This of course had no effect on their admission to a university. It had also become doctrine that all diplomats' children—all foreign children, in fact—were exempt.

But by the time Sam had reached her senior year, she told me that she had noticed that more kids were agreeing to participate. It seems that the middle schools had added “Program orientation” modules to their health ed classes and these were taught in an upbeat, non-threatening way, whilst the Program rules in the high schools were changed; they were “softened” to try to minimize any participant humiliation and limited a lot of objectionable sexual contact, so many more kids were willing to participate.

By the time that Abi had reached her high-school junior year, a significant number of kids were participating. Those who had been through the Program were asked to encourage their classmates and help those in the Program to be able to tolerate, if not enjoy, their experience. It also helped that public

nudity had become more commonplace in society, especially in films and other media, but also in parks and beaches like in Europe. Seeing groups of people riding bikes whilst naked was common too. I had assumed that the kids' acceptance of the Program was partly because of how common public nudity had become, but even more likely, it was because they had gotten more used to the nudity and sex that they constantly saw in the schools. There continued to be kids who resisted but they were now a minority of the students; they were quiet about their objections and were left alone.

However, at the end of her junior year, Abi learnt that major changes would be coming to the Program in her senior school year. A revised Program brochure had come out and there were some changes in it which had gotten her classmates very nervous, she told me. Apparently there had been some major leadership changes in the Office of Social Awareness and they had revamped their policies. Some had to do with changing the Program rules, others had to do with new confidentiality requirements. Suddenly, news about Program happenings in high schools began disappearing from newspapers and other news media.

The media was now reporting that the Office of Social Awareness had begun to effectively and totally block all press coverage and social media mention of school Program affairs, citing student privacy rules, and as a result, public knowledge of all high school Program activities quickly ceased. Abi told me that she couldn't believe how everything had changed in how the Program was run. The Program manager at her school was rigid and militant, so Gerry warned Abi to keep quiet and enjoy her exemption.

Because until now, so few high school kids had been quietly refusing to participate, when the Program rules changed to make it far more onerous than it had been for the past several years, most high school students now didn't realize that in their school district, they could simply choose not to participate. And because information about what happened in other schools was no longer readily available except through personal contacts between individual students, no widespread resistance information was available because of the Program news blackout.

The Naked in School Program once again had become a dreaded part of high school life.

I only learnt about the country's changing high school Program situation from my incoming physics students. These kids represented a good cross-section of the country since they came to the uni from high schools from all over the U.S. From my incoming students, I got a pretty good description of how things were going in their individual schools, and from the national overview that I could visualize, it was not looking good at all.

As the Program continued to become adopted in more and more schools, my colleagues and I had begun to notice a marked degradation in how well our entering students were prepared for college—it was as if they had begun taking stupid pills, actually. We did notice that the students who attended private schools (and charter schools in some states) were significantly better prepared for uni and then I learnt that those schools were not required to have the Program. Was this lack of student preparation a cause-effect relationship? There were far too little data to decide. But suddenly, on one autumn day two years later, everything changed again. On that day all hell broke loose involving the leadership and management personnel of the Office of Social Awareness—the incredible news was that a major scandal had been detected in that agency and the situation had been discovered and exposed by—this was unreal—a high school student. [Details? see *NiS: Kevin and Denise*.]

Following this revelation, everything Program-related was affected. The Office of Social Awareness was abolished and its functions absorbed by a different federal department which then basically defunded it. Whether or not to run the Program in the schools had now become a decision of the states. (Also during this period, several journal papers were published which detailed the negative academic

effects of the Program on student grades. Well, that explained things. I had seen the result of the Program on student preparation first-hand.) And within a year of the news of that scandal breaking, all kinds of additional anti-Program publicity had brought the Program to a crashing halt everywhere.

The Naked in School Program was now history.

That was very satisfying to see. But I still preferred the way we froze it out; that was cool. Okay, ignore the dumb pun. Of course, freezing it out wouldn't have worked in Florida. Or Arizona. Or even Maryland. Oh well.

I like it far better here, where I'm not frozen all the time; Emma's definitely come in from the cold. And now, when I want, I can be... textile-free!

The End

