

FORTRANGLED  
Met Department Panto  
December 2022

**PROLOGUE**

Characters: Narrator (Natalie), Brian Hoskins (Charlie), Rapunzel (Blair), Chris Westbrook (Brian), Thorwald Stein (Ben), Rob Thompson (Rosie)

*[Stage is set for the Lyle building. The narrator is standing alone on the stage in a spotlight.]*

**Narrator:** Once upon a time, there was a professor who lived in a castle on Whiteknights campus. His name was King Professor Sir Brian Hoskins CBE FRS, but don't worry, I won't overcomplicate things, we'll call him King Professor Sir Brian Hoskins for short. Not content with revolutionizing the field of atmospheric dynamics, *and* having a building named after him, King Professor Sir Brian Hoskins wanted to take on a new challenge in the somewhat unorthodox field of in-situ radar. But where to start?

**Brian:** *\*\*Wanders about the stage in thought\*\** Hmm... Sounds like the perfect job for a talented, underpaid and naive, research assistant.... Also known as the lesser PhD student!

**Narrator:** Indeed, King Professor Sir Brian Hoskins was on the lookout for an excellent PhD candidate. He searched far and wide for many months until he happened across a young masters student named Rapunzel.

**Rapunzel:** I'm youthful and still have hope!!

**Narrator:** Though not yet familiar with the ways of the academic world, Rapunzel was a very bright student who loved studying the weather and taking atmospheric measurements. *But* she also had a secret (*\*\*tension in room builds\*\**).

**Rapunzel:** *\*\*Brandishes HAIR\*\**

**Narrator:** Rapunzel was the owner of a very powerful meteorological instrument, called the Handheld Advanced Imaging Radar, or HAIR (*\*\*points at board\*\**), which has the potential to revolutionize the world's understanding of the atmospheric circulation, and improve our weather forecasts to 105% accuracy up to 10 days in advance. Rapunzel was offered a studentship...

*[Brian and Rapunzel mime talking to each other while narrator talks]*

**Brian:** I've heard enough! The job is yours!

*[\*\*Brian and Rapunzel shake hands\*\*]*

**Narrator:** ... and King Professor Sir Brian Hoskins was already beginning to plan the measurements they would make.

*[\*\*Brian and Rapunzel exit stage\*\*]*

**Narrator:** Unfortunately, not all was well on Whiteknights campus. Through the western wilderness and across a great lake, devious scientists from the RADAR group were plotting dangerous schemes on the cold, grey, forty-sixth floor of the Lyle Tower.

*[Dim lighting lights up remainder of the stage as narrator moves to the side. Chris, Thorwald, and Rob enter the stage with concerned expressions on their faces.]*

**Chris:** Have you heard about this new PhD student starting? She and her HAIR belong here, in RADAR group, with us, not with King Professor Sir Brian Hoskins, don't you think Thorwald Stein?

**Thorwald:** Oh yes, Chris Westbrook! Just because he has a building named after him doesn't mean he gets first dibs on the new PhD students! Stay in your lane, Brian!

**Chris:** It's not fair, why are we always overlooked? Shouldn't I also get more say as PhD admissions tutor?

**Rob:** Well, they won't be able to use Rapunzel's HAIR if she's studying in Lyle, especially if the lift is broken...

**Chris:** *\*\*Laughs menacingly\*\** Yes, Rob Thompson. That is an interesting thought. We must poach her from King Professor Sir Brian Hoskins, and trap her in the Lyle building!

*[Lighting returns to Narrator. Chris, Thorwald, and Rob remain on stage in background until end of scene.]*

**Narrator:** Hmm, that's a little concerning..... Oh and by the way, I forgot to introduce myself! I'm Wendy Neale, SCENARIO Administrator. I hope you enjoy the tale of FORTRANGLED!

## ACT I

### Scene 1 - Brian is expecting Rapunzel, but she's swapped to Lyle

Characters: Narrator (Natalie), Brian Hoskins (Charlie), ACP (Izzy), Paul Williams (Hette), Joy (Caitlin)

*[Stage is set for BH building. Brian is sitting at a table in the coffee lounge, tapping a pencil and waiting for Rapunzel to come.]*

**Narrator:** King Professor Sir Brian Hoskins sits with other members of staff in the coffee room of the Brian Hoskins building. Still not used to the feeling of being inside... *\*\*coughs\*\** himself... he was a little uneasy as he awaited his first meeting with Rapunzel...

**Brian:** *\*\*Looks at his watch\*\** I wonder where Rapunzel could be. We were supposed to meet 30 minutes ago!

**ACP:** Don't worry, King Professor Sir Brian Hoskins, I'm sure that the welcome week events are just running over a bit. Anyway, on to more important matters. Have you seen Peter Clark's new mug holder? He says it stops spillages. Personally, I'm dubious.

**Brian:** Hhmm, yes... maybe one day he'll spill the tea on how it works. I have wondered what the potential for vorticity is there.

**ACP:** You mean potential vorticity?

*\*\*Brian goes to answer but is interrupted\*\**

**Paul Williams:** What does her project entail?

**Brian:** Good question Paul. We'll be taking vertical in-situ RADAR profiles of the atmosphere.

*\*\*ACP and Paul Williams look confused\*\**

**ACP:** In-situ remote sensing? That's somewhat of a contradiction isn't it?

**Paul Williams:** And a bit of a departure from your usual work.

**Brian:** *\*\*Responds dismissively\*\** Yes, yes, I know, but we might be able to validate the most recent models with this combined technique.

**ACP:** It does sound very.... interesting.

**Brian:** And that's not all. She has a powerful instrument called the HAIR. It's coded in a very niche language called FORTRANGLED, but she already has experience using it.

**ACP:** Well, I'm certainly looking forward to hearing how it goes!

**Paul Williams:** *[Under his breath]* Well, I bet her hair isn't as nice as mine!

*[Wendy enters the room, bringing her lunch box.]*

**Brian:** Hello, Wendy Neale SCENARIO Administrator, how are you doing?

**Wendy:** I'm having a good day, thank you, I'm just back from the Isle of Wight... yet again!

**Brian:** I was wondering if the new PhD students had finished their welcome week session? My new student hasn't appeared yet, we were supposed to meet half an hour ago!

**Wendy:** Yes, Rapunzel! What a lovely girl. But didn't you *hair*? She's transferred to a different project with other supervisors!

**Brian:** What? No, I hadn't heard that. How has this happened? WHOMST?!?! This is an outrage! Do they not know who I am??

**Wendy:** Yes, she's transferred over to the RADAR group in Lyle! I'm sorry Sir Brian, but they made a case that their project was a better fit for her.

*[Joy enters the room with bravado, overhearing the conversation.]*

*\*\*Brian, ACP, Paul and Wendy jump in surprise at Joy's sudden appearance\*\**

**Joy:** Did someone say the Lyle building? I've heard enough about that place. How can they keep the poor professors and students locked up in that tower?

**Brian:** It's an evil that's plagued our department for years... Just sitting there collecting dust...

**Narrator:** *[forgetting to be narrator for a second]* DUST?!?!

**Joy:** Well *[ignoring narrator]*, one of these days, I, Joy Singarayer, might just have to do something about it!

**Brian:** Oh Rapunzel, Rapunzel why have you let these RADAR group fiends steal you away like this?

*[Lighting fades to black]*

*Wait for Caitlin*

## **Scene 2 - Rapunzel in Lyle**

*[Stage is set for Lyle. Rapunzel and a few other PhD students (the Lyle ones) are working on their research. The mood is fairly dismal, but Rapunzel is cheerful as always.]*

Characters: Narrator (Natalie), Rapunzel (Caitlin), Lyle Students #1 (Thea), #2 (Hannah) and #3 (Alanna)

**Narrator:** We join our depressed Lyle students, on the 46th floor of the Lyle building, as they work on their depressing research. Rapunzel joins them and is thrilled to finally be starting her PhD.

**Rapunzel:** I'm so excited to be finally starting my PhD! Just think of all the things I'm going to discover! Just think of all the pantos I'll be in!

**Lyle Student #1:** Well, there are times when it's nice, but don't you go getting too excited.

**Lyle Student #2:** Yeah, especially here in the Lyle building. I haven't seen another human being in 4 years!

**Lyle Student #3:** True. I really do get fed up with this old tower. I wish we could move to a nice, *new* building that has a working lift!

**Rapunzel:** Like the Brian Hoskins building? I've heard of that place before!

**Lyle Student #2:** Yeah, it's across the vast wilderness and a great bridge.

**Lyle Student #3:** None of us have ever been able to find it, but the legends say that it's a beautiful place.

**Lyle Student #2:** I've heard that researchers from the Brian Hoskins building flew all the way to the arctic just to make measurements of sea ice! Why, that's basically a hair brush with death!

**Lyle Student #1:** And apparently every year, the meteorologists from the Brian Hoskins building launch a weather balloon with a radiosonde to measure the sky!

**Rapunzel:** A radiosonde!!! I want to do that. I want to send my HAIR instrument on a radiosonde above the clouds. Just think of all the things we could learn!

**Lyle Student #2:** That's hil-hair-ious! Forget about it! There's no way you'll make *in-situ* measurements. We're in the RADAR research group. We are only allowed to use remote sensing.

**Lyle Student #1:** And the HAIR might get damaged! Think about all of the split ends!

**Rapunzel:** (*\*\*Temporarily losing her cheerfulness\*\**) That's too bad. I would have liked to at least try.

**Lyle Student #1:** You'll just have to get used to remote sensing, just like the rest of us.

**Lyle Student #2:** Yep. There's no hair-raising outdoor field campaigns for us.

**Lyle Student #3:** No hair-craft observations.

**Lyle Student #1:** No climbing up mountains and skyscrapers.

**Lyle Student #3:** Just boring old office work, combing through data.

**Song:** *When Will My Life Begin*

*Lights lower*

### **Scene 3: Radar Group Meeting**

*[The scene is set for Lyle again. This time, there is a table in center stage, with members of the RADAR group: Chris, Thorwald, Rob, Brian Lo, the unnamed Lyle students, and Rapunzel. Brian Lo is getting his laptop ready for others to join online.]*

Characters: Narrator (Natalie), Brian Lo (Hannah), Thorwald (Ben), Chris (Brian L), Rob (Rosie), Rapunzel (Hette), Lyle students #1 (Thea) and #3 (Alanna)

**Narrator:** In the Philip Lyle building, famously named after Philip Schofield, we join a Radar group meeting with Chris Westbrook, Thorwald Stein, Rob Thompson, Brian Lo and other PhD students who are less relevant to our story and they're all ready to welcome Rapunzel with open arms.

**Thorwald:** I believe Chris has brought our biscuits today?

**Chris:** Yes, I have relieved Brian from his biscuit duty this week.

*[Chris produces a large tin of biscuits from underneath the table and passes it around.]*

**Brian Lo:** Hello, it is I, Brian Lo. I declare this RADAR group weekly meeting officially open! Before we get started, any announcements?

**Rob:** I have some news! I recently took my entire family on a holiday to Poland so that we could complete the A-Z of parkruns! How cool is that?

**Brian Lo:** That's... interesting. But I did mean RADAR-related announcements, Rob.

**Rob:** Also, I went to the co-op on campus earlier to get some lunch, and they were completely out... again! Oh boy, I just love slating co-op uk on twitter. One of these days they might actually reply to me.

**Brian Lo:** Oh do shut up Rob! (*\*\*calms himself down\*\**) Does anyone have any RADAR announcements? If not, I'll get started. Just thought I'd let you all know that I've managed to find

and fix 10 bugs from the UK radar composite this week. Is it just too difficult for some to discriminate between grid north and true north when calibrating radars?

*[Blank faces in the room]*

**Brian Lo:** ...Anyway, I would like to especially welcome our newest RADAR group member, Rapunzel!

*[All extend their welcome to her.]*

**Thorwald:** Rapunzel, I must tell you about Tiger Teams.

*[Rapunzel looks confused]*

**Chris:** Nevermind that, would you like to introduce yourself and say a little bit about your project?

**Rapunzel:** Sure! Hi, everyone, my name's Rapunzel, and I'm just starting the first year of my PhD. I'll be working with the RADAR group on a remote sensing project.

**Rob:** What sort of observations will you do?

**Rapunzel:** Well, I have an instrument called HAIR, which is really powerful, and can be moved really easily by hand to study more than one location.

*[Everyone in the RADAR group is visibly disturbed by the suggestion of moving this expensive piece of equipment around by hand, but they quickly calm down and don't say anything to Rapunzel.]*

*[Some audible gasps?]*

**Thorwald:** How does this HAIR instrument work?

**Rapunzel:** Well, I can explain it in depth if you'd like. *(She pulls out a large binder, and several filled note pages fall out.)*

**Brian Lo:** I'm not sure whether we have time to hear all the details. Maybe we could meet to discuss it in depth later on. But what are the main principles?

**Rapunzel:** *[Gets out HAIR]* Well, it's a small, but powerful, handheld RADAR instrument. It uses an infinite number of frequencies by exploiting the "HAIR-band" to get a perfect Mie scattering profile, which allows it to sample all droplets in the clouds individually.

*[Everyone in the group is stunned, as they gape in awe at this description.]*

**Chris:** How can you possibly put that much computing power onto such a small device? Certainly, such an improvement in the remote sensing field would not have just slipped under the radar...

*[Lyle students pretend that the under the radar joke is funny.]*

**Rapunzel:** I programmed it using the FORTRANGLED language. It's a byte-level, AI-enhanced, quantum-entangled-computing, special purpose programming language. I actually had to come up with the language myself.

*[Silence as everyone tries to understand what she just said.]*

**Brian Lo:** Well, I think it's safe to say that you'll be an excellent addition to this group. How are you planning on using this HAIR instrument?

**Rapunzel:** It can be used as a fixed ground-based radar, maybe at Chilbolton.

*[All in group sigh/nod in relief.]*

**Rapunzel:** ...but I was also wondering (*looks at supervisors*) whether it might be possible to launch it on a radiosonde?

*[Chaos ensues. Everyone jumps up from their chairs and starts shouting. Biscuits are thrown. After several minutes, Chris raises his hand and everyone quiets down.]*

*[Band makes loud crashing noises]*

**Brian Lo:** ORDER! ORDER!

**Chris:** Sit down everyone! Calm down! Everything's going to be fine. This is, after all, the remote sensing group.

**Thorwald:** You see, Rapunzel, we don't make in-situ measurements here. I can suggest again that you join my TigerTeams. I think you might find it rather beneficial!

**Rob:** *[aimed at Thorwald]* Shush you! *[To Rapunzel]* You might lose your instrument and never get it back again! It's far too dangerous!

**Lyle Student #1:** Don't we all remember the story of the S-band RADAR of '84?

**Lyle Student #3:** Ah, yes! or the tale of the mis-calibrated C-band... Let's tell them again now! You see, Rapunzel...

*[All nod knowingly]*

**Thorwald:** Stop it, you two! Can't you remotely sense that you're scaring her? We'll leave that story for another time.

**Song:** ***RADAR Knows Best***

***Lights dim***

#### **Scene 4 - Rapunzel and Joy leave Lyle**

*[Scene is set for Lyle again, but this time, Rapunzel is alone. The lighting is in a sad mood, and Rapunzel is obviously in despair.]*

Characters: Narrator (Natalie), Rapunzel (Rosie), Hectopascal (Blair), Joy (Caitlin)

**Narrator:** Well as narrator, I'm trying to stay neutral, but that RADAR group seem like a real piece of work. Maybe I'll suggest a Mental Wellbeing course...*[make note on a piece of paper for later]*. Anyway, back to the story! Poor Rapunzel sits alone in the Lyle tower, her usual sunny demeanor had been dampened after the turbulent RADAR group meeting.

**Rapunzel:** *Sighs.* Well, this PhD isn't turning out as I thought. *(Waits for a few moments.)* Oh, well. Maybe I'll get a good postdoc after I graduate...in four years.

**Hectopascal:** *(Holds up sign saying "Awwww" for the audience)*

*[Suddenly, there is a very loud crash. A large collection of random objects are thrown onto the floor from stage left. Rapunzel and hPa are very surprised and a bit worried. Then Joy climbs over the mess into the room. Rapunzel assumes she is a thief and hits Joy on the head with a whirling psychrometer.]*

**Rapunzel:** *(Suddenly concerned about what she's done.)* Oh, no hPa, my chameleon companion! What have I done? Who on earth could this be?

*[hPa, not being a person, can't speak, but he's obviously not impressed and dramatically rolls his eyes at Rapunzel, perhaps hands on hips]*

**Rapunzel:** I hope she's all right.

*[Joy slowly awakes, then realizes where she is. Looks up startled to see Rapunzel holding a whirling psychrometer over her head.]*

**Joy:** Oh, dear, I didn't know that riding the Lyle lift was such an elevating experience.

**Rapunzel:** *(Trembling/angry/offended)* Who are you? And WHY have you broken into the 46th floor of Lyle?!

**Joy:** I didn't mean to startle you! My name is Joy Singarayer, and I've come to rescue you!

**Rapunzel:** Rescue me? What do you mean?

**Joy:** From this tower, of course! Aren't you tired of being stuck up here, never being able to make in-situ measurements?

**Rapunzel:** It has been a very difficult 3 hours and 19 minutes... *(hesitates)* But I'm not sure if my supervisors from the RADAR group would like it if I left and just went off the radar...

**Joy:** Oh, you don't need to worry about them! You're a PhD student! You're learning to be an *independent researcher!*

**Rapunzel:** I suppose that's right...

**Joy:** Of course it is! Now, we don't have much time. Let's get going.

**Rapunzel:** No! It wouldn't be safe! Something might happen to my HAIR!

**Joy:** *(Looks with curiosity at Rapunzel's instrument.)* What are you doing with an instrument as powerful as that locked up in this tower?

**Rapunzel:** We're using it for remote sensing. That way, it will stay safe.

**Joy:** You could change the future of weather forecasting if you launched that on a balloon. It will have so much (geo)-potential!

**Rapunzel:** A BALLOON! You mean I could actually use my HAIR on a balloon?

**Joy:** Of course, we'd have to work out some problems with static... but back in the Brian Hoskins building, we have the world's largest supply of helium, *[talks to audience]* which doesn't take much nowadays, I'm afraid.



**Rapunzel:** Well, okay, but we need to be really careful. I wouldn't want to come back to RADAR group next week without my HAIR.

*[Joy and Rapunzel escape / exit stage]*

**Narrator:** Oh I do just love all this drama! Don't you?? I hope you're all as excited about this as me! Anyway, the gang are gonna sing about... pina coladas now?

***The Pina Colada Song (Escape) / The Sheet Nimbostratus Song (Escape)***

**Narrator:** Well that was as lovely as the Isle of Wight! That is act 1 done, I hope you all enjoyed it. You now have a 5 minute break, and then we will start the interval acts. Tarrah!

## ACT II

### Scene 5 - PhD Students at SAPPO

*[Stage is set for the Wilderness. The door for the SCR is at stage left. In between is a maze of jungle plants and possibly ducks. The ducks do something funny to make the audience laugh for a moment, before the Narrator comes on stage again.]*

Characters: Narrator (Natalie), Rapunzel (Catherine), Joy (Caitlin), PhD SAPPO students (#1 Thea, #2 Izzi, #3 Sarah, #4 Martina), Chris (Brian), Thorwald (Ben), Rob (Rosie), hPa (Blair)

**Narrator:** Welcome back everyone! Hope you're all jazzed about the rest of the panto! I personally have SO many questions! Will Rapunzel make it out of Lyle Tower? Will she ever get to make in-situ radar observations? Will Rapunzel join Tiger Teams? And why \*did\* Rob Thompson take his family all the way to Poland for a park run?

**Narrator:** Anyway, time to jump back in! Rapunzel and Joy are in the process of leaving the Lyle Tower.

*[Rapunzel, HPa and Joy cautiously emerge from stage right.]*

**Narrator:** Between our protagonists and the Brian Hoskins building, there is a deep and dark wilderness full of all sorts of wild creatures...

*[One of the ducks quacks, spooking HPa]*

**Narrator:** Their path was windy and narrow. Since it was December, the sun has set long ago, even though it is only 5:30 on a Friday. Joy and Rapunzel will need to put all of their navigation skills to the test as they try to make their way to safety. If only they had a portable LIDAR to see, or should I say "remote sense" in the dark!

*[Joy, HPa and Rapunzel gingerly make their way through the various obstacles. Narrator heads back offstage.]*

**Rapunzel:** I'm not sure if this was a good idea...

**Joy:** Oh, don't worry Rapunzel! Everything's going to be fine.

**Rapunzel:** But what if we get lost in this forest? Wouldn't it have been better to stay in the Lyle tower?

**Joy:** Just think of the radiosondes, Rapunzel!

**Rapunzel:** *(trying to shake her fears)* Yes, the radiosondes!

*[A Canada goose honks at her, and she jumps comically, nearly dropping the HAIR on the ground.]*

**Joy:** *(helping Rapunzel catch the HAIR)* Oh, be careful! Maybe we should have hired movers to bring some labeled boxes and move your things from Lyle...

*[They reach a crossroads. One path leads towards stage front; the other leads towards the SCR doorway. There is a large sign above the SCR saying, "SAPPO," but Joy and Rapunzel don't notice this.]*

**Rapunzel:** *(pointing to the door)* Could that be the gate to the Brian Hoskins building?

**Joy:** It's hard to tell in this light. I suppose it wouldn't hurt to try.

*[Rapunzel and Joy walk up to the door. They knock. After a moment of suspense, suddenly a large group of SAPPOteers emerge from the door.]*

**All PhD Students:** Welcome to SAPPO!

**Rapunzel:** What is SAPPO?

**PhD Student #1:** You don't know what SAPPO is? Who are you?

**Rapunzel:** I'm a first-year PhD student. I'm based in Lyle tower.

**All PhD Students:** *(together)* Ohhh...

**PhD Student #2:** Every week, the students from the Brian Hoskins building meet up after work on Fridays to come to the SCR for drinks and write puns. We call it SAPPO because...

**PhD Student #1:** Well, obviously it's named after...

**PhD Student #3:** *(after a moment)* Well, we don't really remember.

**PhD Student #2:** But it doesn't matter! After all, here we are anyway! You're here to join us, I assume?

**Rapunzel:** Well, I don't know... We're on the way to the Brian Hoskins building.

**PhD Student #1:** Ah, yes. That's where we work and write puns all day!

**Song:** *I've Got a Dream*

*[Song finishes. Suddenly, loud crashing sounds come from off stage, and the members of the RADAR group come on stage.]*

**Chris:** There she is!

**Rob:** Rapunzel, we've come to rescue you!

**Thorwald:** Be careful with that instrument, Rapunzel! These thugs might destroy it!

*[Everyone starts shouting.]*

**Rapunzel:** Wait everyone!

*[Everyone is suddenly silent and freezes.]*

**Rapunzel:** *(to the RADAR group)* You don't need to rescue me! I wanted to leave the Lyle building and make in-situ measurements. I know that there's more danger out here, but what good are remote sensing measurements when there's no way to verify the outputs?

*[For a moment, it seems that everyone might have been convinced. Rob Thompson wipes a tear from his eye.]*

**Rob:** This is even more emotional than when I got my Park Run PB

**Chris:** Rapunzel, we can't let you do this. You'll be glad later when your HAIR is safe in the Lyle tower.

*[At this, everyone in the RADAR group starts chasing Rapunzel around the stage, through the wilderness. Eventually, Rapunzel manages to find the Brian Hoskins building, and the lights fade out.]*

### **Scene 6 - Meteorology Department / Brian Hoskin's Kingdom**

Characters: Narrator (Natalie), Joy, Rapunzel (Izzi), Nicki (Catherine), ACP (Izzy), Brian Hoskins (Charlie), hPa (Blair)

**Narrator:** Well I hope everyone's managed to catch their breath after that little brawl. Luckily, Rapunzel managed to escape the evil clutches of RADAR group and just about made it into the safety of the Brian Hoskins building. It's a well known myth that any RADAR group scientist entering the Brian Hoskins building will be burnt to a crisp upon entrance. Now she's safe, Rapunzel must now attempt to hunt down her original supervisor, King Professor Sir Brian Hoskins.

*[The stage is set again for the Brian Hoskins building. There are 3 office doors at the back of the stage. Rapunzel and Joy enter from stage left.]*

**Joy:** Well, here we are. We've made it all the way to the Brian Hoskins building. I'm going to leave you here to find a new supervisor. I'm off back to the Lyle building for the next phase of the rescue! There are many more students and faculty members to save from that lonely tower!

*[Joy exits again through stage left.]*

**Rapunzel:** *(to herself)* Well, hPa, I guess I'm going to have to find a new supervisor. *(Walks around the stage slowly, looking around.)*

**Rapunzel:** *(to audience)* Do YOU see any supervisors? I don't see any supervisors' offices...

*[There is a big sign on one of the doors that says "King Sir Professor Brian Hoskins." It is written in a colorful font and is mysteriously placed upside-down. The audience points to that door. Potential for Hpa antics here]*

**Audience:** It's behind you!

**Rapunzel:** Do you think that King Sir Professor Brian Hoskins would take me as a PhD student!?

[Hpa encourages]

[Audience: YES]

**Rapunzel:** Do you really?

[Audience: YES, but louder]

**Rapunzel:** Well, all right. Here goes. *(She knocks on the door.)*

*[A moment later, the door is opened by Nicki. Rapunzel is a bit surprised.]*

**Nicki:** Yes. Hello? **Who are you??** I was on an important call. The things one does for Helium these days.

**Rapunzel:** Who are you? You're not King Sir Professor Brian Hoskins!

**Nicki:** No, I'm Nicki Robinson. Didn't you read the door sign?

**Rapunzel:** *(slowly)* I did....

*[She steps outside her office and takes a look at the door. She removes the Brian Hoskins sign and takes it back to her office.]*

**Nicki:** *(Sighs)* So they've been at it again. **These door-sign changing fiends work fast. Yesterday, I was Ricki Nobinson, and today I am King Sir Professor Brian Hoskins. One day I will catch them!**

*[Inside her office, we see a paper shredder. As she attempts to shred the sign, it jams.]*

**Nicki:** Oh dear, it seems that my paper shredder has jammed again. You don't have any experience unjamming paper shredders do you?

**Rapunzel:** I'm afraid not...

*[She is interrupted by hPa. (might enter earlier?)*

**Rapunzel:** Ah, hPa! My trusty chameleon! *(To Nicki, explaining)* He's the best chameleon I've ever seen when it comes to fixing jammed paper shredders!

**Nicki:** *(\*\*Looks a bit bemused at a chameleon walking into her office\*\*)* Hhm, how peculiar. Well, hPa, why don't you have a try at this then.

*[hPa politely nods, reaches his finger down to the paper shredder, and gives it a tap. It immediately comes back to life. The incorrect sign is shredded into oblivion.]*

**Nicki:** Now that we've taken care of that, I can show you to the real King Sir Professor Brian Hoskins's office, if you'd like.

**Rapunzel:** Would you really? That would be very helpful!

**Nicki:** Just follow me!

*[Nicki leads Rapunzel across the stage to the other office door, points to it, and heads back into her office.]*

**Rapunzel:** Ah sick

*[Rapunzel knocks on the 2nd door, labelled something silly - Maybe Ricki Nobinson?]*

**ACP:** Hello! Is it me you're looking for?

**Rapunzel:** I'm not sure, are you Brian Hoskins?

**ACP:** Oh no, that's not me... but I am someone else entirely wonderful. You should really know who I am by now - I'm the Head of School!

**Rapunzel:** So... who are you?

**ACP:** Why I'm Andrew Charlton Perez of course! But you can call me ACP. Are you one of the new students from Lyle?

**Rapunzel:** Yes! I'm Rapunzel - I'm looking for a new supervisor in the department though.

**ACP:** Aha... [rubs hands together] well, I've heard great things about you Rapunzel! I would love to take you on as my new student. I'm an excellent supervisor you see, and I would love another protégé!

**Rapunzel:** [trying to interrupt] But - well - I wasn't -

**ACP:** Let me introduce myself properly... ;)

**Song: ACP (ABC - Jackson 5)**

**ACP:** [*To the choir, graciously*] You may go now

[Choir exits stage]

**Rapunzel:** Well that was certainly something!

**ACP:** Yes I know

**Rapunzel:** Where did you get all these backing singers?

**ACP:** It's just one of the perks of being the head of school ;)

**Rapunzel:** But...

**ACP:** But what?

**Rapunzel:** I don't want to study the stratosphere! I wanted to use a radiosonde!

[HPa holds up a sign saying "Awwww" and ACP looks dejected, heads back to his office]

...

**Rapunzel:** Well, maybe there will be better luck this time. *[She pauses for a moment to read the 3rd and final door sign, which says "Martina Frid" (upside-down, of course).]* Who on earth is Martina Frid? *[Then she knocks on the door.]*

**Brian:** *(Immediately recognizes her.)* Rapunzel! You've come, after all these days! I thought I'd never see you in the meteorology department!

**Rapunzel:** Brian?! Is it finally you?!?!?!?

**Brian:** Yes, my child, it's me, King Sir Professor Brian Hoskins, the man not the building *[he adds hastily]*, the supervisor you have always been destined for.

**Rapunzel:** I've decided I want to use my HAIR for something greater. I want to send it up on a balloon.

*[Lights fade as band plays inspirational music.]*

**Narrator:** Rapunzel and King Sir Professor Brian Hoskins skipped into the sunset discussing their wondrous plans for in-situ remote sensing. In reality, they were just sitting in 1L43, but I think the image of them skipping together is more fun, don't you think?

## Scene 7 - FINALE - Launching of the radiosonde with HAIR

*[The scene is set for the field site. Rapunzel is standing with Brian Hoskins and other members of the met department in the middle of a field.]*

Characters: Narrator (Natalie), Brian (Charlie), Rapunzel (Izzi), Bill Collins (Martina?), Maarten Ambaum (Hette), Joy (Caitlin), Giles Harrison (Caleb), Chris (Brian), Thorwald (Ben), Rob (Rosie)

**Narrator:** The moment has arrived! Brian and Rapunzel have been working for days and they're finally ready to use Rapunzel's HAIR! They may only have one shot so they'd better make it count. We can't have them losing their HAIR and proving the devious RADAR group right! A curious group of scientists gathers round to watch the spectacle.

**Brian:** Well, Rapunzel, it's time we put that instrument of yours to good use.

**Rapunzel:** *(Excitedly)* You mean we're going to launch the balloon *tonight*?

**Bill Collins:** Yes, Rapunzel. That's right. I, Phil, I mean Bill Collins, have a *6th sense*... I can feel that there is perfect weather... *coming in the air tonight*.

*[Drum from Phil Collins song]*

**Rapunzel:** Okay, well, I've been waiting for this for my entire PhD career!

**Narrator:** *[whispers to audience]* Didn't she only get here this week???

**Rapunzel:** I just hope that we'll be able to understand the data when it comes back.

**Maarten:** Don't worry. It will all be very simple if you read the second edition of my text book.

**Rapunzel:** Well, then. Let's launch the balloon.

**Joy:** There's only one problem.

**Rapunzel:** What's that?

**Joy:** There is no more science-grade helium in the world. It was all used up yesterday.

**Rapunzel:** But surely there's something we can do! Isn't there some way we can find a bit of helium?

**Giles:** There's no need to use a science grade weather balloon! With a radiosonde small enough, a party balloon is all you need!

**Rapunzel:** Of course, Giles! It's a good thing my HAIR is weightless, too.

**Giles:** That will be perfect.

**Brian:** Great! Then we'll use a party balloon. Where do you suppose we can find one?

**Narrator/Wendy:** Oh, I have plenty of those. I always take a party balloon along with me. You know. Just in case.

*[Wendy proceeds to fill a party balloon with cheap consumer-grade helium. She then hands the balloon to Rapunzel. Just at that moment, the rest of the Lyle outcasts arrive, including the RADAR group.]*

**Chris:** Stop, Rapunzel! What are you doing? You're going to lose that instrument forever! It will be lost in the great wilderness.

**Rapunzel:** But Chris, just think of what we'll be able to do once I've launched it. This is going to change the course of meteorology forever.

*[The RADAR group discuss amongst themselves for a few moments.]*

**Chris:** Well, Rapunzel, we've talked it over

**Thorwald:** The RADAR group has decided that if that's really what you want to do with your HAIR, then we'll give you our best support. **Also, it would be completely unprofessional if we didn't.**

**Rob:** You see, we're moving back into the Brian Hoskins building, too. I think we're all beginning to see the light.

*[Everyone in the department cheers.]*

**Brian Hoskins:** Well, it's time to launch the balloon. Rapunzel, Rapunzel, let go of your HAIR!

*[Rapunzel launches the balloon, and everyone watches as it rises into the sky.]*

**Song: I See the Light**

**Narrator:** Well, what a lovely moment for the team. Unfortunately, Rapunzel never saw her HAIR again. It was lost forev-HAIR in the wilderness. However, the data collected on that flight was something truly remarkable. It changed everything we know about how the weather works, and many great papers and even PhDs were based on it. But even more than how it changed

the science of meteorology, it changed the meteorology department. Because of the HAIR (and the relentless work of Joy), the researchers from the lonely Lyle tower were welcomed back into the great Brian Hoskins building, and that was the beginning of a golden age that saw a combining of in-situ and remote sensing observations that had never been seen before!

**Song: You Make My Dreams Come True**

(Everyone on stage to sing!)