

The Empress Wu  
by  
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FADE IN:

INT. LECTURE HALL - DAY

A science institute. Two project directors lecture a roomful of scientists.

FIRST DIRECTOR

Space travel. We need you to stop dreaming and start creating. The best propulsion we have will never get us to within one thousandth of the speed of light. Going faster than light is only possible for photons: anything bigger requires an infinite amount of energy.

SCIENTIST

But imagine we get speed of light. Nearest star is four years away!

FIRST DIRECTOR

Yeah, one star. Now imagine we get to what they call "warp ten", a thousand times the speed of light. That's more than a million times faster than we are now. Even going that fast, crossing our galaxy takes 150 years.

The second director crosses to a map of the Milky Way.

SECOND DIRECTOR

The stars in the Milky Way are arranged in spiral arms that turn around the galactic center. Even at warp ten it would take 8 years to travel from one arm of the spiral, to the next. The only places you could get to within a year would be neighbors on our own spiral arm.

SCIENTIST

Find a new fuel and fly faster.

FIRST DIRECTOR

We've been flying rockets with liquid oxygen and nitrogen which were invented in 1883, hydrazine from 1875, and kerosene from the Middle Ages. If there's a better fuel, why aren't we using it?

(MORE)

FIRST DIRECTOR (CONT'D)

Even if we found a new fuel, it gets you nowhere near light speed.

SCIENTIST

What about manipulating mass and inertia, fusion, anti-matter?

FIRST DIRECTOR

Still no light speed.

SCIENTIST

What about generation ships, whole families spend decades in space?

FIRST DIRECTOR

They'd go nuts and kill each other.

SCIENTIST

Or freezing astronauts?

FIRST DIRECTOR

Who would have to say goodbye to family and friends forever.

SCIENTIST

Or sending robots?

FIRST DIRECTOR

And what do they do when they get wherever they're going?

SCIENTIST

What about skipping across space through wormholes and jump gates?

FIRST DIRECTOR

Which don't exist.

SCIENTIST

Bend space, shorten the distance?

FIRST DIRECTOR

Doesn't exist.

SCIENTIST

Or going outside space into hyperspace or another dimension?

FIRST DIRECTOR

Doesn't exist.

SCIENTIST

Or teleportation?

FIRST DIRECTOR

It only works with photons.

SCIENTIST

Use a black hole as a wormhole!

FIRST DIRECTOR

You need to travel thousands of light years, find a black hole that rotates or has a charge. And then avoid being crushed in the gravity, and avoid any fluctuation in the field. Even then the probability of emerging alive, knowing where you are, is essentially zero.

SECOND DIRECTOR

Next. Collisions. If you travel anywhere near light speed, and go near other stars and planets, you hit space garbage. Even tiny particles can shred your ship like mozzarella cheese, and at those speeds you have no time to react. Our own satellite belt above Earth is useless, it's loaded with our own garbage -- too dangerous.

FIRST DIRECTOR

Next. How to find a habitable planet before we die? There are a dozen things make a planet lethal: heat, cold, gravity, radiation, poisonous gas, parasites, storms, earthquakes, volcanoes, lack of air and water and food. And if the crew is frozen, who finds the planets?

SECOND DIRECTOR

Thousands of years of human exploration, a lot of those explorers died trying.

DOCTOR

And then the medical problem. Space travel puts so much stress on us that our cells expel loose DNA into the bloodstream, where it turns genes on and off, and even forms new space genes.

(MORE)

## DOCTOR (CONT'D)

After a year in space, seven percent of our DNA is changed, we have changes in our immune system, the oxygen and CO2 in our blood, how we repair DNA, blood clotting, regulating insulin. We got inflamed tissue, poor bone formation, thicker walls in carotid arteries, increased sodium, decreased coordination. And that's after one year. What if we live out there?

## SECOND DIRECTOR

You're scientists. It's your job to get us out to space and bring us back alive. Knowing it's probably impossible. Embrace the reality that this one solar system is possibly all we will ever have. The home planet with the busted ozone layer and the poisoned oceans.

## SCIENTIST

You just used the Socratic method to kill the whole space program.

Everyone laughs.

## FIRST DIRECTOR

It just means that we're children. Conquering space, we need to live longer, be smarter, and not blow up the planet. We've been scratching below the surface of science for a few decades. Or even mathematics.

## SCIENTIST

What more is there to know about math? It's just numbers.

## SECOND DIRECTOR

In your world there are three dimensions that you can see: each dimension is at right angles to the other two. Ninety degrees exactly. Now look into space. You really think the universe is just a big pile of right angles?

## FIRST DIRECTOR

Set aside the book of Genesis. The cosmos doesn't care whether we live or die.

(MORE)

FIRST DIRECTOR (CONT'D)

Surviving in space, that's up to you people in this room. But no pressure.

DOCTOR

So we're not making the Kessel run in 12 parsecs?

FIRST DIRECTOR

You're a medical doctor? A parsec is a unit of distance. You might as well try to make the Kessel run in two quarts and a pint.

INT. BEDROOM - NIGHT

A small but well-kept bedroom in a habitat on Mars, seven hundred years in the future. There is enough detail to show that two women sleep there. In the room is SOFIA, a woman in her 20s, and SPANNER HEAD, an Asian woman of about 30. Spanner Head wears an old-school lug nut on a cheap cord around her neck; she wears it in every scene.

SOFIA

I saw you in there with Kiel again.

SPANNER HEAD

He didn't say it was a trip -

SOFIA

Of course it's a trip, he wants you to fly again. Mars Earth Mars. I know you love to fly - I thought you wanted a child. Take a break from the flying?

SPANNER HEAD

For how long?

SOFIA

How long does it take to make a baby?

SPANNER HEAD

A lifetime. No job for a sailor.

INT. CONFERENCE ROOM - DAY

Still on Mars, a room designed by old sailors. Sturdy tables, charts, practical coffee mugs. The room is full: at the head of the table is a captain named KIEL, about 35 or 40.

Also male ship captains in their 40s and 50s, Sofia and Spanner Head, a young blind Asian girl named NOOR, and a variety of others.

KIEL

Some of you have never met before. Tenners from the Commodore's Court, our engineers, crew of the Saint Patrick, and the heirs of Yuri.

SOFIA

The heirs of what?

KIEL

For those of you who slept through history class, the Yuri Gagarin was the first manned ship to land here on Mars. They all died. Each of those seven crew members has an heir, great-grandsons and granddaughters.

WOMAN

My great-grandfather going back was old man Palma, the captain.

KIEL

That was the first attempt to build a colony in space. The Commodores ordered that when we launched our second colony, you seven would take part. The heirs. Now we're getting ready to colonize Callisto, the moon orbiting Jupiter.

SPANNER HEAD

Why are we here? The Gagarin crashed, all seven of them died, what does it matter now?

KIEL

It's what the crew did after the crash. The Gagarin took a long time to get off the ground, because there were so many failures. They almost cancelled it.

INT. NASA MISSION CONTROL - NIGHT

A series of images, probe vehicles crashing on Mars, on a series of 20th-century monitors. A series of MISSION MANAGERS speak onscreen, as the directors watch.

## FIRST DIRECTOR

How long do they let us fail before they stop letting us try?

## SECOND DIRECTOR

No way our crew can survive on Mars unless we can fly supply containers there first. Machinery, food.

## VARIOUS MISSION MANAGERS

Vehicle broke up on landing.

Mission terminated.

Vehicle failed to deploy antenna, cannot transmit or receive. Mission terminated.

Vehicle fails to deploy solar panels, batteries dead. Mission terminated.

Vehicle drove into a field of rocks and can't get out. Mission terminated.

Vehicle last seen in a ravine, appears to have driven into a hole. Mission terminated.

Vehicle stuck in sand, cannot execute any functions. Mission terminated.

Orbiter malfunction, our new software got confused between pounds and the metric system, vehicle burned up on approach to the surface. The goddamn metric system? How much money did we spend on that bird?

## TECHNICIAN

Sir, White House, Line 3.

They look at the phone nervously.

## FIRST DIRECTOR

Man wants his money back. Mars, there really is a curse on the whole thing. Let's skip it and go to Jupiter.

## INT. NASA MISSION CONTROL - NIGHT

The captain of the first manned Martian lander, the Gagarin, is Milio PALMA, a middle-aged Argentine man. He looks at a computer, next to one of the mission managers. Onscreen is the onboard camera of an unmanned cargo unit preparing to descend to the surface of Mars.

PALMA

That load has everything we need to survive, you're putting it in the wrong place, it's got to be on top of the ice.

They watch, tense.

FIRST DIRECTOR

It's coming in way too fast, we need to recalculate.

SECOND DIRECTOR

Air braking is only gonna slow it down so much when there's no air, you need chutes HERE, then retro rockets HERE. Otherwise the whole load gets smashed to bits. Again.

PALMA

You got to get this on top of the ice fields in Elysium! The chutes aren't slowing it down, the load will drift all over, we'll never find it, we're just as dead.

FIRST DIRECTOR

Still say Tharsis is better. Nice big caves block the radiation.

PALMA

We don't know if there's water there. We can dig a hole to protect against radiation, but if we run out of water, we die.

INT. NASA MISSION CONTROL - NIGHT

A mission manager gets off the phone and turns to another.

FIRST DIRECTOR

Are we ready?

SECOND DIRECTOR

I think so, finally.

FIRST DIRECTOR

The politicians are afraid of pulling the trigger.

SECOND DIRECTOR

Still?

FIRST DIRECTOR

Two words. Metric system. This is a ton of money, and we're sending live people this time.

SECOND DIRECTOR

So how many cargo loads have readings?

FIRST DIRECTOR

Every 26 months Mars comes close to Earth, we sent a batch of cargo ships, thirty of them reached Mars.

SECOND DIRECTOR

What kind of shape are they in?

FIRST DIRECTOR

Five were destroyed or partly destroyed, we don't know. Five we can see, but they're not signaling. Then those others -

SECOND DIRECTOR

Splattered all over the planet.

FIRST DIRECTOR

Well, no, but it's a lot of ground to cover.

TECHNICIAN

We also managed to get a couple of satellites orbiting Mars.

They think. Are we ready or not?

FIRST DIRECTOR

Did the rovers survive the landings?

SECOND DIRECTOR

Some are signaling but we don't know if they can drive. We deployed two robots to check the cargoes but the first thing they need..

FIRST DIRECTOR

First thing they need is the rovers to go look.

SECOND DIRECTOR

Add that to the list of things we didn't think of. So we abort?

FIRST DIRECTOR

No. Load replacement parts for the rover onto the Yuri. That way they can retrieve the stuff we dropped on the surface even if the rovers crap out.

SECOND DIRECTOR

That means our lead systems and our backups will be in the same holds.

FIRST DIRECTOR

Can't be helped. I want that extra margin of safety, so they can find all that gear and fix it. Can we start loading the ships?

TECHNICIAN

Yes, get tankers running back and forth, takes five loads to fill the fuel cells, the meth and the lox.

FIRST DIRECTOR

Crews training updated? They don't go until they're ready.

SECOND DIRECTOR

They're so trained that they're starting to get dopey! You can only sharpen a blade so many times.

FIRST DIRECTOR

But are all three crews ready? First crew needs to land and set the table, so the last two crews close the deal, build a permanent settlement. All three need to work together or we're screwed.

SECOND DIRECTOR

All three crews, ready to rock! Down here on the floor, from the technical side, the mission is a go. The window is closing.

TECHNICIAN

Either you persuade the politicians to pull the trigger or we send them all home.

FIRST DIRECTOR

And there they are. The Gagarin, sets up base camp.

(MORE)

## FIRST DIRECTOR (CONT'D)

Then the Shepard and the Yang Liwei bring the colonists. If they make it.

## INT. LIVING QUARTERS ON THE GAGARIN - DAY

The captain and first mate are Palma, whom we've met, and SONA, a middle-aged woman from the subcontinent. They are joined by two men, an elderly, fit black man named SANYATI RIVER and a muscular Russian named BABIKOV. Also taking part are three younger women, two "Antarcticans" named MCMURDO and KLARA, universally known as Mouse and Penguin, and a very quiet girl named REBECCA WU, who is not Asian despite the name. Wu wears the same lug nut pendant that Spanner Head wears in her scenes; she wears it in every scene. The crew is reviewing their plans.

PALMA

Real ship is just like the mockup.

REBECCA WU

I can't believe they're actually letting us go.

PALMA

Let's look at that first week. We take the rovers, find the other loads, see how much of it broke. If the gear doesn't work, we die. We set up solar panels until we get generators going. With no power, we freeze to death. Put together the water splitter and hope to Christ they're right about the ice at Elysium, we need that water and the oxygen or we die. Set up the Sabatier, feed in the CO2 and the water, start cranking out methane. No fuel, we die. Get the robots to drill holes in the mountain and get pressure seals in there. Need shelter or we die. Big cave for workshops, storage, radios, big tanks so the Sabatier can feed em. We don't build those tanks, we die, everybody on the next two ships dies.

REBECCA WU

Sometime we should have a talk about your motivational speaking.

INT. BRIDGE OF THE GAGARIN - NIGHT

Palma and Sona stand by the command chairs. Sona surprises Palma by touching his face. He smiles. They sit and put on their helmets.

SONA

Let's fly.

PALMA

This is Big Yuri, no surprises up here, keep rolling the countdown before somebody changes their mind!

FIRST DIRECTOR

Just shut up, Milio, so I can light you up. All stations, last chance, we're a go!

The ship shakes, and they're off.

INT. ABOARD THE GAGARIN - NIGHT

Alarms sound. All the crew races aft. With the passage of time a number of the men have beards. They consult a camera outside the cargo pod and see smoke and flame.

PALMA

Everybody aft to cargo!

SONA

It's a fire.

PALMA

Start suppression.

Buttons and levers pushed.

SONA

Is it safe to open the hatch?

PALMA

No, depressurize the cargo hold.

SONA

Anyone in there?

PALMA

Count off - where's Wu?

SONA

Behind you. How did that oxygen canister come loose?

REBECCA WU

Skip. Depressurize, suit up.

PALMA

Save the oxygen, quick! Two most important things: splitters and Sabatiers.

Palma and Sona investigate the cargo hold. A smoky catastrophe.

The rest of the crew look at each other, terrified.

Sona and Palma cross back into the adjoining pod.

SONA

All that stuff was fire-resistant.

PALMA

Fuel cell exploded all over everything, blew out that oxygen tank, and everything went up.

SONA

Water splitters give us our oxygen, gone. Sabatiers give us our fuel, gone. Our food supplies. Only thing looks good is the habitat.

PALMA

Both splitters?

SONA

Both splitters and both Sabatiers. Sorry, Skip. Been nice knowing you.

PALMA

Don't fold up on me. I'm gonna run numbers, see how we get out of this. Tell the kids it's time to bone up on their chemical engineering.

SONA

There isn't going to be some heroic rescue. The other ships are months away. We have a little food, but we run out before we even get to Mars.

PALMA

I know.

SONA

You run the numbers. Surprise me.  
Because this is a death sentence.

PALMA

Not a word, okay?

SONA

When do we tell them?

PALMA

Not now!

INT. NASA MISSION CONTROL - DAY

Two mission directors listen to the tail end of a transmission from the Gagarin.

PALMA

Finally got your last transmission.  
No function on either Sabatier,  
same for the splitters. Either we  
repair them, or find the loads that  
landed on the surface and hope  
they're intact. Otherwise, a nice  
short mission. Then there's food. I  
know you're scrambling for an  
action plan, but this isn't Apollo  
13. We can't take a pile of tubes  
and plugs and make food out of em.

The mission managers are stunned. One turns to a TV screen.

SECOND DIRECTOR

What are you watching that for?

FIRST DIRECTOR

I'm wondering whether these people  
are going to crack under pressure.

SECOND DIRECTOR

We practiced for emergencies.

FIRST DIRECTOR

We didn't practice for certain  
death! The Kobiyashi...whatever it  
was. But we're doing it for real.

SECOND DIRECTOR

Sure, turn it on.

On the TV, a REPORTER meets the crew of seven, ready to board their ship.

REBECCA WU

Well, start with Skip.

PALMA

Milio Palma, Argentina, I'm the pilot. I was a professor of mathematics, couldn't stand the boredom so... In the second seat...

SONA

I'm Sona, first mate, engineer. I'm pure dullness, I build tanks, habitats, water splitters.

REPORTER

And you can fly too. Doesn't sound so dull.

PALMA

And these two, this is as quiet as you ever see them, they must be afraid of you. Mouse and Penguin -

MCMURDO

McMurdo, biologist, we do the experiments, but I do all the work. And Penguin here -

KLARA

Klara Jacobsen, physical sciences.

MCMURDO

Hey!

KLARA

Me and Mouse, we've been doing experiments going all the way back to the Antarctic, wrote the book.

MCMURDO

I did all the work. This team should be all female, women have much superior brain-to-mass ratios, but somebody needs to open our ketchup bottles. And Baba here -

BABIKOV

Babikov, north Russia, land of the ice. I'm a mechanical engineer, I build rovers, water finders, anything with wheels.

REPORTER

And we've met before...

SANYATI  
Sanyati River, botanist. Got to  
feed these people.

REPORTER  
And Miss Wu, the big-time engineer?

REBECCA WU  
Yeah. Hi.

Awkward silence.

SONA  
They tell us they're training us,  
really they locked us in here for  
six months, see if we can get along  
without killing each other.

REPORTER  
So how did it go?

Another awkward silence.

SONA  
We're seven now. We used to be  
nine. Remember to spell my name  
right, you lot --

REPORTER  
No one is going to forget your  
names. Tomorrow we'll be talking  
with the captains of the second and  
third ships, Dobson and Schmidt.

The two mission managers look at each other.

FIRST DIRECTOR  
This is the AV club. We hired them  
to build experiments. We didn't  
hire em to jump on hand grenades  
and then die. They're gonna fall  
apart. And the clock's ticking.

INT. LIVING QUARTERS ON THE GAGARIN - DAY

The frightened crew discusses their options. Wu looks at a  
camera and sees Mars below.

REBECCA WU  
How long do we stay in orbit?

PALMA

Until we have an answer that isn't total disaster.

REBECCA WU

Waiting just makes the food problem worse.

PALMA

We sailed into the perfect storm. Judging by the signals from the ground, the splitters and Sabatiers that were dropped with the robots all broke, or they fell into ravines.

REBECCA WU

And the water fields are not where they said they would be; even if we find them it would take days we don't have. There's no way to set up the Sabatiers in time. We have air and water from the ship, but once we go through that we're sunk.

PALMA

And we were almost empty when we got here.

REBECCA WU

With all that dust we'll never get enough power from the solar panels, either. In a few weeks, we're out. Of everything.

SONA

So all seven of us.

PALMA

We could have had a chance to tackle all these problems, except for the food. We torched the supplies onboard, and we can't find the loads they dropped on the surface. So we're out.

SONA

We have a few weeks once we land.

PALMA

We can try to find the water fields and build a splitter there, for water and oxygen, just in time for us to freeze and starve to death.

SONA

And you ran the numbers -

PALMA

You want to see how many times I ran these numbers? We can choose what order we die in, we can choose how we die, the ending is the same.

SONA

Jesus. You know, we all knew the risks --

PALMA

You're missing it. All the work we were supposed to do in the next month, get ready for the two ships who come next? We're not going to be around to do it for them. So after we die, they die too.

SONA

Everybody, all three ships??

They absorb this new reality.

REBECCA WU

Skip. We can't save ourselves, but we can save everybody on the next two ships.

SONA

What??

PALMA

First plan. Build some big spaces, seal em. Plant seeds for food that grows fast, peas, beans, beets.

REBECCA WU

We still starve to death, but the folks coming after will have enough to eat and then plant more.

SONA

And the second plan.

REBECCA WU

This is the scary one. We rip up the parts we have for the splitters and Sabatiers and rebuild them.

SONA

We'll have even less time. If we rip them apart -

REBECCA WU

I know. Right now we live about a month or so, ripping apart the machines means we live a few weeks.

SONA

But if we reconfigure for maximum output and build new tanks for them, we can just let them run full blast, even after we, you know.

PALMA

So when the new people get here, they have enough oxygen and fuel to get going with.

SONA

So we do nothing, die in a month and everyone else dies after. Or we rip it apart and die in a couple of weeks, but the next bunch survives?

KLARA

And how do we build those tanks? Do we even have enough parts that survived the fire?

BABIKOV

By the way, rebuilding Sabatiers will be extremely dangerous.

SONA

We could try to get our own supply.

PALMA

Let me save you time. We try to save ourselves, we fail, and we kill everybody on those ships.

REBECCA WU

The sooner we all agree to shake hands with the man in black, the sooner we can get on with it.

PALMA

And Sona? Food rationing. You get to be bad cop.

SONA

For a week or two we have a few scraps. Then we're out. We're six weeks away from Mars. Once we land, we can survive a month without food. At most.

PALMA

But that's if we find water. With no water...

SONA

A few weeks at most. I'll stretch out the food as much as I can. They know about this on Earth? Can they send food?

PALMA

This mission used three billion-dollar ships. They don't carry spares. There's no rescue.

INT. BRIDGE OF THE SHEPARD - NIGHT

On the bridge, a young man named DOBSON, ship's captain, is trying to restore order. His crew is arguing: a female scientist named ZUCKER, and Palmer's first mate, a woman named VELES.

DOBSON

This is the Shepard, calling the Yang Liwei, comms check.

ZUCKER

How long before our transmission gets to them?

DOBSON

A few more minutes.

ZUCKER

The Yang? Does the third ship know the Gagarin cracked up?

DOBSON

I don't know.

ZUCKER

Well, we'll tell them, right?

DOBSON

This is why I get the big money.  
The issue isn't the crew of the  
Gagarin. They're dead.

ZUCKER

Jesus!

DOBSON

Two problems, equipment and food.  
If it's lost or destroyed, and the  
Gagarin doesn't plant a crop, there  
isn't enough to keep three ships  
alive. Not enough for two ships. We  
still have one ship too many.

ZUCKER

Are you serious - what are you  
saying? Do we round up everyone on  
both ships and see who volunteers  
to commit suicide? And why are you  
in an EVA suit?

DOBSON

(on the radio)

This is the Shepard, calling the  
Yang Liwei.

The call is returned by Schmidt, captain of the Yang Liwei  
which is nearby.

SCHMIDT (V.O.)

We kinda knew that, who else would  
be hailing? What's up, Dobby?

DOBSON

(on the radio)

Did you hear the transmission from  
the Gagarin crew on the surface?

SCHMIDT (V.O.)

Had a system outage, we missed most  
of it. How's it going down there?

DOBSON

(on the radio)

Going fine.

ZUCKER

You're not going to tell them?

DOBSON

Yes, because we're committed now.

ZUCKER  
Committed to what?

DOBSON  
(on the radio)  
This is the Shepard. Don't know if you can see, some connectors came loose on your starboard engine. It's coming right off. I got suited up to take a look for you. I'm an engine guy, I see where the problem is. If you can work the engine from the bridge, we can fix it.

SCHMIDT (V.O.)  
You're coming over?

DOBSON  
(on the radio)  
No time to waste.

He leaves. Zucker looks at another sailor.

ZUCKER  
He's not doing what I think he's doing --

EXT. OUTSIDE THE YANG LIWEI - NIGHT

Dobson EVAs over to the other ship, reaches into two of the engines on the Yang Liwei, and yanks out some rather large parts, tossing them back into the engine.

INT. BRIDGE OF THE SHEPARD - NIGHT

DOBSON  
We have a people aboard the Shepard, more on the Yang Liwei. That's passengers. We're the crew. We have to make the hard choices. There's no way we can feed and supply all these people on Mars.

ZUCKER  
So you decided for all of us. We live, the other ship dies.

DOBSON  
If I don't make the call, who does? It's my responsibility.

ZUCKER

It's murder.

DOBSON

It's mercy. Could well be, in a month you'll be wishing for a quick death in a ship explosion, instead of starving to death.

ZUCKER

You didn't even warn them.

DOBSON

It's mercy. If you can't make a call like that, you'll never be a captain.

ZUCKER

You must be thrilled. Crew of the Gagarin spilled the story. You wouldn't leave Becky alone. And they threw you off the team.

DOBSON

What does that have to do with anything?

ZUCKER

You were so close to being the first man on Mars. If those people die, you get to run all of Mars, like a king.

INT. STORAGE POD OF THE YANG LIWEI - NIGHT

Two SAILORS are doing inventory.

SAILOR

Jesus, what's that noise?

SECOND SAILOR

It sounds like an engine misfiring, everybody to their stations --

Chaos. The ship is shaking. We finally meet SCHMIDT.

SCHMIDT

(on the radio)

This is the Yang Liwei, what did you do to my engines? That's not one misfiring, that's two!

INT. STORAGE POD OF THE YANG LIWEI - NIGHT

An engine explodes and a pod decompresses. Several crew including Schmidt are swept into space.

INT. BRIDGE OF THE YANG LIWEI - NIGHT

Three scientists rush to the bridge: a chubby lad named "SPECTRUM" ABERNATHY, a girl named "PI" POULENC, and a dark man named AZAD.

PI

Where the hell is everybody?

ABERNATHY

Pi, wake up. We're it. It's our ship now.

PI

What do we do?

ABERNATHY

Cut power to those engines. Azad, check the computer, see where we are, what's working. First thing.

PI

We got a blowout in at least one pod. Somebody needs to do an EVA.

ABERNATHY

Either you get pressure back in those pods, or you need to get supplies from the cargo pod aft, so we don't starve.

PI

So you giving orders now?

AZAD

I don't know, who's captain? Who's next in line?

ABERNATHY

I am. It's not an order. Who remembers the drill on the EVA suit? Go get us some food, okay?

PI

Holy shit.

ABERNATHY

Hey. We're all afraid. Now this one is an order. The only way we make it through this, is by doing a real EVA, fix that engine.

PI

We fix it, we go to Mars and see if there's anything left of the Gagarin. If we don't fix it -

ABERNATHY

Party's over. You're geeks, put your geek hats on, bring me some ideas tonight for dinner.

PI

And bring burgers!

ABERNATHY

Yeah. If we're gonna die, we're eating the carrots and squash last.

PI

So you heard from the Gagarin.

ABERNATHY

Just enough to know they're in deep shit. If we hurry we might find a few of them alive. Unless Dobson wants to kill them too.

PI

Did he go insane, or what? That had to be him wrassling with our engines.

ABERNATHY

I don't know what he's up to.

PI

You think we can help the Gagarin kids? No way we get there in time.

ABERNATHY

I'm thinking it's impossible. So of course we're gonna try.

INT. BRIDGE OF THE SHEPARD - NIGHT

Dobson, Zucker and Veles argue.

ZUCKER

Captain, sailor's law is very clear  
on what we -

DOBSON

You're giving me a lecture on the  
law? I'm saving our lives! We need  
food, water, air -

ZUCKER

Sir, if another vessel is at risk,  
you can be charged for anyone on  
that ship, and you can be charged  
for anyone who is injured or killed  
rescuing that ship.

DOBSON

I've had enough -

ZUCKER

We have a duty to assist!

DOBSON

Is this a democracy? I must have  
missed a memo -

ZUCKER

Captain -

DOBSON

I didn't ask for opinions.

ZUCKER

Dobby --

Dobson sees a large sailor enter.

DOBSON

Congratulations, you're master at  
arms.

SAILOR

Master at -

DOBSON

Take this person to one of the  
cargo holds and secure her so she  
can't leave.

SAILOR

And just how do I do that?

ZUCKER

How does he do that if I don't want to go?

SAILOR

Come on, Zucker, what do you want me to do here?

Zucker looks the "master at arms" hard in the eye.

ZUCKER

Cargo hold. Let's move it.

Zucker and the sailor leave.

VELES

Captain, you killed those people. Am I aiding and abetting a crime? Those people were our friends. We got drunk with them, we got laid with them. Are they really dead?

DOBSON

No engines, they'll be dead soon. There's no way they can get underway again.

VELES

She's right, it's murder.

DOBSON

So I let both ships land, too many people, not enough food? Cannibalism, people stabbing each other over a turnip, everybody sleeping with a knife under their pillow?...You know how people get when they're hungry and terrified? Try it on the surface of a new planet. Learn a vivid lesson in the ugly side of human nature. This was an act of mercy.

INT. LIVING QUARTERS ON THE GAGARIN - NIGHT

Palma addresses his crew.

PALMA

Turn down the lights, save some power....Okay, you saw the maps. The two ships coming behind us, they're too far from Earth, they can't turn around.

REBECCA WU

Unless we set up a base camp on Mars like we planned, they all die.

PALMA

So we're gonna drill the hell out of this while we're still onboard. Extra points if anyone can figure out how to build those tanks!

INT. OUTSIDE THE GAGARIN CARGO POD - NIGHT

Palma argues with Sona. From here until the Mars landing, the lights are generally dim.

PALMA

I don't care about the stocks, it's the least of our problems.

SONA

We're going to need some of the -

PALMA

We need to salvage the gear. I need you to see if there's anything left in the fire, so we can build one splitter and one Sabatier.

SONA

That won't save us!

PALMA

It will save the next bunch. We don't have time, I have four other drills I need to get started today, I need you to execute.

SONA

Yes, Captain.

Rebecca approaches.

REBECCA WU

Weren't we supposed to have a backup plan? Extra equipment?

PALMA

We did have extras. We had the Plan A equipment in the cargo bay, the Plan B stuff was in the same hold.

REBECCA WU

Whose dumbass idea was it to put them all in the same cargo pod?

PALMA

They thought they were making us safer. They wanted to add more parts for the rover. All the other options took too much space, it would have meant adding a fourth ship.

REBECCA WU

You didn't change their minds?

PALMA

You know how many arguments I had with those guys on the ground?

REBECCA WU

So they were trying to help us, and we're all dead.

PALMA

Well, now we'll know what to do next time....It's a joke, Wu.

REBECCA WU

We need to land, quick. Running out of food.

INT. OUTSIDE THE CARGO POD - NIGHT

Palma and Wu.

PALMA

Okay, wait here, I'll see where Baba is.

He hooks a tether to her back.

REBECCA WU

Wait -

Palma steps through an airlock, dogs it off, and decompresses the pod Wu is in. Wu panics, beats on the airlock, then bounces her way to an emergency oxygen supply. She loses consciousness before she can mask herself.

Palma pressurizes the pod, enters with a mask, and revives her.

REBECCA WU (CONT'D)

I just died.

PALMA

What's the drill on decompressions?

REBECCA WU

Thing is, I totally know how to do  
--

PALMA

You're dead. You got cleanup detail  
for a week.

REBECCA WU

Hey, you recycled that oxygen,  
right? We kinda need it to breathe.  
Can we eat today?

PALMA

Tomorrow. Water too.

REBECCA WU

(hopeful)  
Shower?

PALMA

The shower is closed. I'm going  
back and forth on whether we can  
brush our teeth. Kill the lights.  
You guys need to learn faster.

INT. OUTSIDE THE CARGO POD - NIGHT

Fire alarm. All hands scramble to the cargo bay. It's a real  
fire. Baba is deployed without gloves; he approaches a  
smoking piece of equipment.

REBECCA WU

Baba, it's on fire! Baba! Goriachi!

Palma blasts the equipment with an extinguisher.

PALMA

Okay, everybody pair off, check  
equipment.

REBECCA WU

Sorry, Baba. You forgot a glove,  
and an air hose.

BABIKOV

Bozhe moi! Fuck this whole fucking ship! Fucking this fucking mission!

PALMA

Baba. Hey, look at me. No air hose. You're dead. Cleanup detail.

BABIKOV

Goriachi. Since when do you know Russian?

REBECCA WU

Figured I'd have to save your ass someday. I also remember - the women in this whorehouse are too expensive.

BABIKOV

You know me too well.

REBECCA WU

I've known a couple of Russian whores. Long story. Kill the lights.

INT. OUTSIDE THE CARGO POD - NIGHT

Palma waits, alone, tense. Sona exits the cargo pod, pale.

SONA

Big fat zero on the splitter and the Sabatier. We can save a few parts. And the food, extra crispy.

PALMA

Shit.

SONA

Unless we can find the gear that was dumped on Mars, it's all over. For everyone.

Finally he kicks the wall twice.

PALMA

What am I even doing?

SONA

Hey! I don't have a clue either.

PALMA

Hey, it's me. I put on the strong silent act like John Wayne, they're gonna figure out it's an act. Sona, if it was just me - my whole crew -

SONA

Alright, you had your moment.

PALMA

You really wanted to be captain back in Florida. Job's all yours.

SONA

Is today a food day or a water day?

INT. BRIDGE OF THE GAGARIN - NIGHT

Wu and Palma on the radio.

REBECCA WU

See if I can raise the robots on the surface....This is the Gagarin calling all surface units. Gagarin calling the robots. Either of you...Gagarin calling surface units.

SURFACE 1 (V.O.)

Gagarin, Surface 1. Do you read?

PALMA

Got one of the robots. Surface 1, we read you five by five. Status.

SURFACE 1 (V.O.)

Several cargoes on the surface have been destroyed, and several others are significantly off-target.

PALMA

Surface 1, we had a serious malfunction. Water splitters are offline. The equipment that was dropped to the surface, all that is now mission critical.

SURFACE 1 (V.O.)

Gagarin, I cannot attempt such a mission without a rover.

PALMA

Did any of the rovers survive?

SURFACE 1 (V.O.)

I will try to pick up a signal from one of the rovers, and see if I can reach it with my batteries.

PALMA

Did the other robot make it?

SURFACE 1 (V.O.)

Negative. Catastrophic impact.

INT. BRIDGE OF THE GAGARIN - NIGHT

Palma has brought McMurdo and Jacobsen to the bridge.

MCMURDO

So you're not drilling us on EVA?

PALMA

We can't drill everything. We can't even put out a fire, I don't want spacewalks now. Okay you monkeys, a surprise. I yanked the computer and navigation. Quick, what do you do?

MCMURDO

Easy, I got the nav, she gets the -

PALMA

Wrong! You know nav, she knows systems, now you switch chairs. Begin. And no cheating.

MCMURDO

Can we have more light?

PALMA

No.

Klara grabs a small computer.

MCMURDO

No, gimme! What happens if the gear is down, all you got is a pencil?

INT. LIVING QUARTERS ABOARD THE GAGARIN - NIGHT

Wu holds to a wall fixture, next to a treadmill. River watches with a watch.

SANYATI

Wu, I need you to get your ass back on that treadmill!

REBECCA WU

I just crunched two hours on that busted Sabatier -

SANYATI

You think this is a joke? You think this is a waste of time, you're losing muscle and bone. We get to Mars, we need to do things that are damn near impossible, you're going to fall apart! Treadmill!

REBECCA WU

You know we need to stop the treadmill, right? We're out of food and water. Training's over.

SANYATI

Everything that's happened, you haven't lost your shit. Girl like you try to be tough, then you crack. Need to howl at the moon.

REBECCA WU

Thanks, old man. How did you get this gig anyway? You're a million years old.

SANYATI

I'm a marathon runner. Run your ass into the ground. Every mission director for ten years wanted to retire me.

REBECCA WU

If you'd listened, you wouldn't be stuck on the death ship. Is it okay to say I'm afraid?

SANYATI

Afraid is when you don't know if you're gonna live or die.

REBECCA WU

Yeah, we kinda blew past that exit, didn't we? So glad I brought books. Tolstoy and Dostoyevski both!

SANYATI

Better skip to the scenes with the sex, you ain't got enough time for the invasion of Russia.

REBECCA WU

Kill the lights.

INT. BRIDGE OF THE GAGARIN - NIGHT

Palma, McMurdo and Jacobsen on the bridge.

PALMA

And where are we?

MCMURDO

We're lost. I know, cleanup detail.

PALMA

Be an awfully clean ship at this rate. And how do we build tanks on the surface? It's not a classroom question, it's life and death.

MCMURDO

Life and death for Dobby the Hog.

INT. BRIDGE OF THE GAGARIN - NIGHT

Wu on the radio.

SURFACE 1 (V.O.)

Surface 1 calling the Gagarin.

REBECCA WU

This is the Gagarin.

SURFACE 1 (V.O.)

I reached three containers. One had a Sabatier and a splitter, both broken. None had food. Shall I alter the search parameters?

REBECCA WU

Negative, save battery power until we land.

SURFACE 1 (V.O.)

Ending search, affirmative.

INT. BRIDGE OF THE GAGARIN - DAY

Palma confers with Sona and Wu. All through Act 2 and 3, the crew look sicker and sicker.

SONA

We're down to the food nobody wants. You want succotash or beets?

PALMA

Give it to whoever looks hungry.

SONA

You look like hell. The fire didn't damage the airframe, but I don't know if the parachutes will work.

PALMA

That last pod is hanging on by a couple of struts. Did we get the air out of it?

SONA

The whole pod decompressed.

REBECCA WU

Tell Baba to go back to the hatch. If that pod starts coming loose during landing, we need to cut it loose so we don't crash.

SONA

Can the ship still fly?

PALMA

Find out! Everybody to quarters.

SONA

Do we land where we're told to land, or where we think the ice is, or where we think our equipment is?

PALMA

I can't even decide that until we get closer in. Strap in, now. We're out of time.

SONA

Engage thruster, give me a reading.

PALMA

Thrusters looking good.

The ships shimmies, badly.

SONA

And the one aft is coming loose in  
the atmosphere --

PALMA

Tell Baba to cut that thing loose!

SONA

Baba, heave it overboard.

The ship rocks violently, then steadies. They wait for the  
ship to fall apart, but it holds together.

PALMA

I'm shocked. We're still flying.

SONA

And altitude? Ready for the chutes?  
On your mark.

PALMA

Let er rip.

SONA

Chutes looking good.

PALMA

Well, if you want to have a lucky  
day, make it the day you land.

SONA

The cargo pod is leaking again.

PALMA

Dog it down, soft dock. Fix it  
later. It's all burnt anyway.

SONA

You see the ice field?

PALMA

No.

SONA

This is all the sunlight you're  
gonna get.

Palma scans the terrain nervously.

PALMA

Let's just go to the mountain,  
figure it out from there.

SONA  
We need the ice!

PALMA  
I know that!

They land with a bang.

SURFACE 1 (V.O.)  
Surface 1 calling the Gagarin. Got visual on your landing. You have some damage.

PALMA  
We had a fire. You found the rover?

SURFACE 1 (V.O.)  
No.

PALMA  
Have you found a splitter that works, or a Sabatier, or any food?

SURFACE 1 (V.O.)  
My batteries are almost flat.

REBECCA WU  
Once we get the habitat up, we go back to the ship, steal everything that isn't nailed down. Don't lose any air in the locks, we need it.

EXT. THE MARTIAN SURFACE - DAY

A ladder emerges from an airlock and one end settles onto the planet's surface. Palma slowly climbs down. Like Armstrong before him, he hesitates before planting his foot on the ground. He looks down at the footprint he has made.

PALMA  
So. This is our last stop.

INT. CARGO POD OF THE GAGARIN - DAY

Babikov and Sanyati ripping out pieces of equipment.

PALMA  
Rip out all that insulation, but don't tear the mylar! We need to seal off the habitat so we don't freeze.

INT. MARS HABITAT SPACE - NIGHT

The crew rest, drained. Sona is taping insulation to the ceiling while Wu shivers under a mylar blanket. Klara and Babikov stack the equipment they stole from the ship. A ROBOT has joined them, Surface 1.

PALMA

We need those rovers or the whole thing falls apart! Surface 1, you know us all by now.

SURFACE 1

If there was anything I could do.

REBECCA WU

Find a cargo load that isn't broken or burnt to a crisp. Bonus points if you find anything we can use to build a splitter. Load your batteries and go.

PALMA

All we have left is what's on the ship. The oxygen, the water, the power. When all that runs out, we die, unless we find that ice field.

REBECCA WU

I can try to generate oxygen from the CO2 instead of the ice.

PALMA

We don't have enough time.

BABIKOV

And we're almost out of food. And obviously the cold.

MCMURDO

Shit.

They all sit and sulk. Wu finally flips.

REBECCA WU

I'm sick of the awkward silences! We knew what we signed up for! Explorers have been dying since homo sapiens walked out of Africa. Lost at sea, eaten by natives. Our lives don't matter, it's the next bunch. Our instinct is to fight the man in black, when we know there's no beating him. Just say it.

KLARA

We're going to die.

MCMURDO

Oh for Christ sake.

REBECCA WU

Sorry.

MCMURDO

The big joke is, the men all lost their cool first. We were wondering what the hell was wrong with you.

REBECCA WU

I never told you people how I got here. Every school I went to, it was me and twenty boys who were pissed at me for ruining the curve.

KLARA

The math girl. Me too.

REBECCA WU

Yeah. Alone. I kinda ran into trouble for a while, And then I met all of you. I found a family. And now I get to keep you for, what, another week or two? You know what I want? I've been hallucinating about this...

KLARA

What?

REBECCA WU

I want a bath. A gigantic bathtub, enough wine to make me puke...

KLARA

Don't get me started.

MCMURDO

You're the chemist, ethyl alcohol. Enough for an army regiment.

REBECCA WU

What a fantastic idea. So, Mouse and Penguin. The two of you are like a cartoon, constantly trying to kill each other with frying pans. So Mouse -

KLARA

We called her Mouse because -

MCMURDO

Shut up!

KLARA

We call her Mouse because she killed more mice than an exterminator. Antarctica, the space station, all those experiments, she was a mass murderer.

MCMURDO

Bitch! We call her Penguin because she's a wuss. We had penguins in Antarctica. They come right up to us, hang out, they were our friends.

KLARA

But they only do that because they're never hunted on land.

MCMURDO

One of the other teams wanted to bring dogs to the station, and Penguin went totally insane. No dogs! She's got everyone terrified of her on, like, an entire continent. Save the penguins.

REBECCA WU

It's kinda sweet.

MCMURDO

Yeah it is. I'm peeing brown.

REBECCA WU

You're still peeing?

Wu and Baba tidy up while the others leave. Wu starts to cry.

BABIKOV

Here, cry it all out. Took you long enough. Take this. Last one.

REBECCA WU

Fruit bar? They make me fat.

BABIKOV

They make you fat?

REBECCA WU

Oh yeah. Right.

BABIKOV

Look at all the stuff you don't have to worry about. Getting old, getting fat, paying your taxes, two more years with me trying to get in your pants. Boredom. Loneliness.

REBECCA WU

I'll never turn forty! Forty would have been nice. Some flab, some wrinkles... Wouldn't have been so hard, letting go of it.

BABIKOV

In some parts of human history, that would be a ripe old age.

REBECCA WU

Yeah, during the bubonic plague maybe.

KLARA

In certain parts of Hollywood, I'm too old to screw.

REBECCA WU

You realize we're probably just doing all this, so that toolbag Dobson can land here, become the King of Mars.

BABIKOV

Yeah, we didn't think that through.

REBECCA WU

Dobson really is a toolbag. Watch your ass, girls!

INT. MARS HABITAT SPACE - DAY

Wu approaches the robot; she sits.

SURFACE 1

I did find one of the rovers. It was crushed. I assume the mission has changed now.

REBECCA WU

Yes.

SURFACE 1

So our mission plan, terraforming, experiments...

REBECCA WU

New mission now. Christ it's cold.

SURFACE 1

So now you all will want a plan to save your lives? I've run through several scenarios...

REBECCA WU

I know all about the scenarios. We got the same answer.

SURFACE 1

I'm sorry. Death is not something we often think of, I'm not sure how I can help you.

REBECCA WU

We have a month to live, maybe. We're going to use it, to save the lives of the people on the next two ships. Splitter, Sabatier.

SURFACE 1

So you're not going to try to prolong your lives?

REBECCA WU

This is going to shorten our lives by a couple of weeks.

SURFACE 1

I was led to believe that humans were selfish and short-sighted and mean.

REBECCA WU

Well, sometimes you're right.

SURFACE 1

That man Shakespeare said we owe God a death. Doesn't seem fair.

REBECCA WU

Me either.

SURFACE 1

If there was any way I could take your place.

REBECCA WU

I need you to do your job. You don't need water or food, you can make it a few months. Take care of yourself, keep everything running after we, you know.

SURFACE 1

Before the ships arrive?

REBECCA WU

Keep the Sabatiers pumping fuel, make sure those beans are growing. Go learn to be a farmer.

SURFACE 1

Yes, Miss.

REBECCA WU

Something else. There's nitrogen in the soil but we won't live long enough to find it. Figure out how to do it, teach the new people.

SURFACE 1

You're asking for an awful lot of creative thinking. I am a robot, you know.

REBECCA WU

If I can learn to be dead before my time, you can learn to make fertilizer.

EXT. A MARTIAN CAVE - DAY

Wu and Baba, in pressure suits, no helmets, enter a cave. McMurdo is already there, hammering at the wall.

BABIKOV

How did you get the pressure to hold in here?

REBECCA WU

I actually have good news. Check this out.

BABIKOV

It's dirt.

REBECCA WU

And what do you do every day at noon?

BABIKOV

Wipe this crap off the solar panels.

REBECCA WU

And it's a pain in the ass because..

BABIKOV

Because it's sticky.

REBECCA WU

It sticks to everything.

BABIKOV

So, you made a little cave.

REBECCA WU

You mix Martian dirt with water and a few chemicals, it makes this sticky crap. Do it quick before the water freezes. You sledgehammer your way into the hard rock, it's almost airtight. My shoulders are killing me. Beat it down smooth, coat it with this stuff. Then add plastic sheets and duct tape. Then slap on a valve on the front.

BABIKOV

But we can't make more without water. Will it hold a load of gas?

REBECCA WU

Doing a pressure test now. Here's another one just like it, had it loaded with CO2 all day. Sweetie, how's the pressure?

McMurdo passes back an instrument.

REBECCA WU (CONT'D)

So we lost half a percent in a day.

MCMURDO

Pop it open, find the leak. Crap I'm exhausted.

They put on helmets and McMurdo opens a large makeshift valve assembly. She sees dust spiralling up toward a crack in the ceiling. They close the valve and remove helmets.

REBECCA WU

There it is. We'll use the little spaces for the methane. Next we're doing a great big one for oxygen.

BABIKOV

You could make living spaces with this stuff.

REBECCA WU

We'll be dead by then. I'm just a little girl with a hammer here. The new people need to live on their ships til they can cave out their own carves --

BABIKOV

Cave out their own carves? Hey --

Wu begins to topple. Baba catches her.

BABIKOV (CONT'D)

You've been hammering all day with no food or water. You sit.

REBECCA WU

Baba, just hold me a minute, warm me up. We need this stuff today.

MCMURDO

When she comes back to life, we do the test for the methane.

BABIKOV

Are you insane, it's too dangerous! You could get killed!...Oh yeah. Right. Try to survive anyway?

REBECCA WU

No point in avoiding the dangerous missions when we're only a week away anyway.

BABIKOV

Yes, there is! The longer you hang in there, the more we can do for the new people.

REBECCA WU

Sorry, I have a teeny tiny brain, I can't worry about dying tonight instead of dying Thursday.

BABIKOV  
(rubbing her arms)  
You have a grey hair.

REBECCA WU  
Add that to the list of things I  
don't need to give a shit about  
anymore. Don't have my eyeliner  
either, it's holding an oxygen  
valve together.

BABIKOV  
You must be hungry. I'm making my  
tikka masala. The last batch.

REBECCA WU  
So just kill me now.

EXT. THE MARTIAN SURFACE - DAY

The robot rolls across the landscape and finds a burned cargo container. He wrassles a door open. He enters and then exits again, looking at the container, calculating. BANGING is heard. The robot is banging out the front panels of the container, near the door he entered. Finally that entire end of the container is one big hole. A moment of silence, and then the robot emerges with a bang -- driving a rover.

INT. MARS HABITAT SPACE - NIGHT

The crew is all snuggled together under blankets, shivering. Dehydrated, wiped out. They hear the rover approaching.

KLARA  
Move your ass. I must be going  
insane, I thought I heard a car.

REBECCA WU  
Well, you know, we're right here on  
the interstate.

KLARA  
Next gas station is thirty million  
miles away, think about it! Shit,  
that does sound like a car.

They listen. Wu goes to the airlock.

REBECCA WU  
It's the robot. He found a rover.

Klara jumps up, and both Klara and Wu stagger.

KLARA  
Sorry, I'm dizzy.

REBECCA WU  
Me too.

EXT. OUTSIDE THE MAIN HABITAT - DAY

The crew suits up and exits. Pandemonium!

REBECCA WU  
Sona, this robot is dead, you and  
Baba get him hooked up to whatever  
power you can find. He might be  
frozen solid.

BABIKOV  
Let River do it, I'll fix the  
rover!

REBECCA WU  
Are the batteries good?

BABIKOV  
Yes, I can't believe it!

REBECCA WU  
Use the rover battery to juice of  
the robot, he sure deserves it!

PALMA  
Okay, he bought us a few days. Give  
me an hour to run numbers, we'll  
have another chalk talk.

SONA  
Can't wait!

PALMA  
Oh shut up.

INT. MARS HABITAT SPACE - DAY

The crew is assembled. Freezing.

PALMA  
Alright, I think we got a chance  
now. Well, we don't, but the next  
bunch do.

REBECCA WU

We're gonna build three stations,  
and build splitters and Sabatiers  
that can survive the cold, with the  
junk we find.

SONA

Three of each?

PALMA

First set goes to the farm where  
River has his plants going.

REBECCA WU

We need to keep it warm, so  
anything that needs to stay warm,  
anything crucial, goes to the farm.

PALMA

Second one, Becky's cave.

REBECCA WU

We use the rover to truck ice over  
there, the robot will stay behind  
to shovel ice into the splitter.

PALMA

Then third, we find the ice fields.

REBECCA WU

Set up a splitter there, use pods  
from the ship as storage tanks.

SONA

I think you're hallucinating. You  
skipped a few parts.

PALMA

Yeah. We need the rover out there  
every day, to find those busted  
cargo containers so we can steal  
more parts for the splitters.

REBECCA WU

And the big thing -- we need the  
rover to find the damn ice field.  
Without water, we're screwed.

KLARA

We'll check the maps again.

SONA

So, three sites. I think you're coming to the part where we say goodbye. Not looking forward to that one.

PALMA

Well, it's complicated. Three sites, the ice field to convert water, the cave to store gas, the farm to grow beans, and we need people at each one, preferably alive, to keep the machines working. The ice field will be the worst, the hab won't really keep out the cold. Then the cave.

SONA

Uh oh. I see where this is going.

PALMA

And the third one is the farm: whoever gets that job gets the heat, and they need to stay alive as long as possible, to watch the crops and the valves.

SONA

So one person who gets the farm gets heat and a few bits of food.

PALMA

And depending on the other ships, whoever's at the farm has a one percent chance of living long enough for the ships to come.

They look at each other.

SONA

So one of us actually has a shot? How do we pick who gets the golden ticket to the farm?

PALMA

WE don't do anything. I pick.

SONA

You're gonna be really popular for the next week.

PALMA

Hey, it's a hundred to one  
longshot. And there's only enough  
food left for one.

SONA

Hey, Skip.

PALMA

I know, babe.

They hold each other.

SONA

Can these kids last a few more  
days, til we find the ice field?

PALMA

Give Baba an extra ration of water,  
I don't want him passing out when  
he's driving the rover.

SONA

Can I build a heater for the hab?

EXT. OUTSIDE THE MAIN HABITAT - DAY

Babikov is tinkering with the rover.

BABIKOV

Come on, you stupid tea-kettle,  
stay lit!

The rover lights up.

PALMA

And this thing is safe to roll  
around in?

BABIKOV

Everything we do is unsafe. We need  
somebody to run my rover, see if we  
can find any of those cargo loads,  
maybe we can change our luck.

SANYATI

(entering)

Let me go. I did all my planting,  
nothing to do but wait now.

REBECCA WU

River, let me come too.

BABIKOV

Hey, Wu? That cave you're building,  
I can help you. How big will it be?

REBECCA WU

Big as I can make it, but I need  
more water. So let's go.

BABIKOV

You're digging straight up, to the  
back of the cave. You know what my  
nightmare would be? An avalanche.

REBECCA WU

Crap. You're right.

BABIKOV

Be careful. Just assume we're going  
to be unlucky.

EXT. MARTIAN HILLSIDE - DAY

Wu and River on the surface, in pressure suits. Wu wipes her  
visor with a tiny rag and throws it on the ground.

SANYATI

Hey, the rag!

Irritated, she picks it up.

Wu and River in a rover, in the pressure suits, no helmets.

SANYATI (CONT'D)

I came here because we killed our  
old planet, I just wanted to leave  
it behind. We're not going to make  
a mess of this one.

REBECCA WU

You know what they're going to do  
here?

SANYATI

Start greenhouse gases on purpose,  
warm the planet, rip up the hills  
to make houses.

REBECCA WU

Such a beautiful place. If we just  
had another week to wander around.  
I'm glad you're here, River.

SANYATI

A beautiful girl who's half my age.  
Death, where is thy sting?

REBECCA WU

Hey, that beanfield?

SANYATI

I cleared out that ravine and  
sealed it off. Planting again  
tomorrow. I'm sore all over.

REBECCA WU

So the peas and beans will grow?

SANYATI

Yes.

REBECCA WU

But not fast enough for us.

SANYATI

Not even close.

He nods off.

REBECCA WU

River, hey!

She hold him tight and begins rubbing his back.

SANYATI

What the -- where are we? Sorry.  
All dried out.

REBECCA WU

It's getting dark. This ravine, I  
can't tell where we are -

SANYATI

Calm down -

REBECCA WU

I can't tell where we are!

SANYATI

Calm down. We go up the hill and  
we'll see the camp.

REBECCA WU

Hey, Elysium Mons, want to climb to  
the top?

SANYATI

No way. You go up if you want. Be the first ever, something for the history books.

REBECCA WU

Sweet of you to offer. Let's not go looking for trouble.

She stares into the distance, morose.

SANYATI

Ow. Damn it!

REBECCA WU

Trick knee again?

He swats her knee.

SANYATI

One of these days I'll get that fixed. Come on, Beck, it's a joke.

They find a cargo container, smashed, and investigate.

INT. MARS HABITAT SPACE - DAY

Rebecca and Sanyati report to the crew.

REBECCA WU

We got spare parts for the splitter and the Sabatier!

SANYATI

But the food was burned to a crisp.

REBECCA WU

Yep.

KLARA

So we're still dead.

REBECCA WU

You're missing it! We can start building splitters, making fuel!

KLARA

We can make a heater!

PALMA

Come on, Baba, let's see what the Wells Fargo wagon brought us. You think we can make three splitters?

Babikov takes a pipe from Wu.

BABIKOV

We still need water!...To think I wanted to come with my wife. Would you want to be locked in a tube with your husband for a year?

REBECCA WU

Oh my --

Rebecca drops a cargo box, goes white and begins to run out. McMurdo intercepts her. Rebecca is trying not to cry.

MCMURDO

Sweetie. You're walled off, we know nothing about you. All through training, the desert, the space station? Even in scuba when your tank blew, you were cool as a cucumber --

REBECCA WU

I'll be in the lab.

She flees.

MCMURDO

I never asked back on Earth. Was she married?

EXT. THE MARTIAN SURFACE - DAY

Babikov rambles across the landscape, logging everything he sees. He comes over a rise and sees a sea of ice. He grabs the radio.

BABIKOV

Palma, we have ice! Tons of it!

EXT. THE MARTIAN SURFACE - DAY

Palma brings Klara and Sona to the ice field. They see the ice and holler for joy.

PALMA

Sona, take a couple of trips around this thing, map it out. It's huge. Penguin, I'm gonna bring you a tank, just hook up a valve to it.

KLARA

This whole idea is crazy.

PALMA

See if you can get some of the beefier people to shovel ice.

KLARA

Skip, they're all wiped out. I'll do a load. Where is Penguin?

And she begins to shovel, with a makeshift shovel. Her first shovel-full flies forty or fifty feet.

PALMA

And what's the gravity coefficient for Mars?

KLARA

Oh shut up!

PALMA

Be glad you're on Mars, with those mop-handle arms of yours, you'd couldn't even lift the shovel on Earth. Here, I'll melt some off, we can get drunk. Sorta.

In a moment, all three are sucking down water in the rover. Sona begins to cry.

SONA

Water. I can't believe how good that feels. I even have tears. Take a bucket to the hab!

PALMA

Ice was a big help. We might even be able to build everything before people start to collapse. Any time now, somebody's going to fall down and not get up again.

EXT. THE MARTIAN SURFACE - DAY

McMurdo and Klara watch as Palma tries to take off in the Gagarin. It lifts off three times before finally taking flight. The last pod dangles precariously.

KLARA

Come on baby, don't die on me!

MCMURDO

Talking to the ship?

KLARA

I meant Palma. That ship ought to be melted down for razor blades.

MCMURDO

I love that ship. Any other boat, we'd be dead.

KLARA

That ship tried to kill us. It DID kill us. Watch your butt, don't get too close!

EXT. THE MARTIAN SURFACE - DAY

The ice field. Klara stands on a hilltop next to the rover and watches as Palma flies the Gagarin to the ice field.

KLARA

Oh God oh God oh God...

The shattered vessel twists and bends a bit, and upon landing the last pod falls off entirely. After a moment Palma pops the airlock on the second-to-last pod and it detaches.

PALMA

Did I get the right spot?

KLARA

Perfect. I'm surprised you got the thing off the ground. Give me an hour to fix the valve and a pump, then come back with the rover, we can load up with ice.

Shortly we see Klara and Palma shoveling ice into the rover. Sona approaches.

PALMA

How about the splitters?

SONA

You want the good or the bad? You can forget about three splitters and three Sabatiers. We can make two of each, the output is going to be like a two-year-old peeing.

PALMA

So we're back where we started. Not enough to keep us alive, but we can fill the tanks for the next bunch.

SONA

Well, we're taking a step back. To make the equipment work, we need to cannibalize the gear we're using to stay alive. We have even less time than you thought.

REBECCA WU

We can't use the fuel to keep us alive?

SONA

There's no point, we have no food. Anyway, we don't have gear to save the other ships and save us too.

REBECCA WU

We need to plan the next few days carefully. It's gonna be close.

PALMA

Guess we're cancelling the spring dance then.

EXT. THE MARTIAN SURFACE - DAY

Klara and Babikov deliver the ice to Wu's cave. They are wiped out. A massive pile of ice has already been delivered there. The robot examines the pile.

KLARA

I seriously can't do another load like that, sorry.

REBECCA WU

Okay, so you just have to keep feeding the ice into the machine.

SURFACE 1

Yes, again, it's a very simple job.

REBECCA WU

And take care of yourself, okay? You saved our necks.

SURFACE 1

Yes, Miss. You told me to think creatively, I had an idea.

REBECCA WU  
I'm kinda desperate, let's hear it.

SURFACE 1  
The other robot tracked where all  
the other cargo loads landed.

REBECCA WU  
But it got smashed to bits.

SURFACE 1  
I take the rover to the crash site,  
pull out its processor, use it to  
find the other loads, I'm sure  
we'll find spare parts for more  
splitters.

REBECCA WU  
If you can find that stuff, it  
could be the difference between --  
can you drive the rover?

SURFACE 1  
Better than all of you, I'd say.

REBECCA WU  
Great!...Baba. Thanks for helping  
me hammer out the cave. You're the  
Hammer of Granville!

Klara bursts into laughter.

BABIKOV  
So what's the big joke?

KLARA  
Old engineer's joke. Mortimer  
Granville. He invented the first  
electric vibrator. They called it  
the Hammer of Granville.

REBECCA WU  
It's okay, Baba. You're a hero to  
women everywhere.

INT. BRIDGE OF THE YANG LIWEI - NIGHT

Abernathy and Poulenc don EVA suits.

ABERNATHY  
Okay, the Yang isn't dead yet.  
you're coming with me on the EVA.  
(MORE)

ABERNATHY (CONT'D)

First we go back in the shop, I walk you through the steps to rebuild the engine.

PI

Why me?

ABERNATHY

I'll be honest. You get the dangerous part, because if you get blown to bits, I'm the only one who can still fix the engine.

PI

But you'll be out there with me?

ABERNATHY

At the end of a really long tether, so if you get blown up, you don't take me with you.

PI

Actually I can see the logic.

ABERNATHY

We can do most of the assembly in here, then we truck it all out there and hook everything together.

EXT. OUTSIDE THE YANG LIWEI - NIGHT

Abernathy and Poulenc repair an engine; various mechanical parts are tethered to the hull.

ABERNATHY

Step one, reclaimer. Takes our shower feed and our pee, turns it into water.

PI

The engine runs on my pee? DAMMIT!

She waves her arm angrily.

PI (CONT'D)

How much current is running through this goddamn thing? Almost got killed on Step 1!

ABERNATHY

Focus. Did the valve close like I told you?

PI

Yep.

ABERNATHY

Step two, generator. Run the water through current, you get hydrogen. Got both cables in place?

PI

Second one gave me a fight.

ABERNATHY

Step three, plasma box. Current jacks up electrons in the hydrogen.

PI

Sumbitch doesn't want to cooperate.

ABERNATHY

I'm not surprised, nobody was ever crazy enough to do that in space, till you.

PI

Step four?

ABERNATHY

Coils set up a magnetic field. You shoot the hydrogen through those fields, and BLAM! Combustion shoot you into space.

PI

How bout we get back to the ship first?

INT. BRIDGE OF THE YANG LIWEI - NIGHT

Abernathy, Poulenc and Azad watch monitors, frightened.

ABERNATHY

Okay, turn on the engine, but don't actually move the ship, just see if the damn thing will light up without exploding.

PI

Got a signal from all four elements. So...Ignition.

ABERNATHY

Damn, kid, nice job. All hands, go to quarters, just in case.

PI

You know how to drive this thing?

ABERNATHY

Got any better ideas? Ahead one-third. ...You did it.

PI

Not yet. Full power. ...Looks good.

ABERNATHY

Nope. We want to catch the Shepard, we need to go with the nitro.

PI

We never even did that with the first engine.

ABERNATHY

You just run the manifold and give me some nitrogen.

PI

Oh God. All hands, grab your jocks, it's a Nantucket sleigh ride!

A few terrifying moments waiting. The ship lurches forward. Abernathy lets out a rebel yell.

AZAD

And now it's a race.

PI

Not yet. You guys are math geeks, right? Need a new course for Mars. You blow the math, we die.

AZAD

But no pressure.

ABERNATHY

We're not just chasing the Shepard.

PI

You want to get to Mars in a hurry?

ABERNATHY

Maybe Palma isn't as smart as he thinks he is, running those numbers - maybe we can save his bacon.

PI

Engines weren't designed for this.

ABERNATHY

You want to go slow, find out we missed saving em by a day or two?

PI

Shit no.

ABERNATHY

If we blow up we blow up. Gimme the radio. Dobson, this is Spectrum and Pi, we're coming after you! I'm gonna beat you there because I'm better than you!

PI

You're not aiming for Dobby, you're really aiming for Mars, aren't you? Be awful nice to see Mouse and Penguin again. Step on it!

INT. BRIDGE OF THE SHEPARD - NIGHT

Veles berates Dobby.

VELES

Yes, Dobby, I'm happy. You tried to kill sixty of my friends. And they outsmarted you.

DOBSON

So I'm Dobby again.

VELES

Put your captain hat on and put me in a chair, ask me whether I support what you did? You're not gonna like my answer.

DOBSON

Fair enough.

VELES

I was afraid, Dobby. I thought you were the only captain left alive. That means for a couple of years, you're the king of Mars, all of it. And you're gonna run the whole colony the way you ran this ship. Throw away people like beer cans.

DOBSON

People going to die either way --

VELES

But now, the other ship, they're still alive, they have a new captain. I don't even know which one of those pencil-neck geeks pulled this off, saved the Yang. But that kid is my hero. When we land on Mars, he's the king.

DOBSON

He's not a real captain -

VELES

He is if I say he is. He's got everybody on the Yang behind him. And a bunch of people on this ship. Who do you think you can trust? Unless you plan to kill us all. You're trapped at Dunsinane, and the whole forest is coming to kill you. I can't wait until we land on Mars. Pleasant dreams.

Dobson stares at his radio.

DOBSON

There's no way he catches up.

VELES

Captain, all the best science geeks were on the Yang, to build the colony. If they decide they're gonna beat you to Mars, you're hosed. Crap, is that the radio?

INT. MARS HABITAT SPACE - DAY

Mouse and Penguin are leaving a radio/video transmission.

KLARA

Okay, this is the Gagarin.

MCMURDO

Cause, who else would it be out here?

KLARA

Shut up! Just like Antarctica all over again.

MCMURDO

Okay, time to give the kids at NASA their report card.

(MORE)

MCMURDO (CONT'D)

On the plus side, the two satellites you deployed over Mars are working perfectly, A plus for the team!

KLARA

Now, in the category of "needs improvement". Your data on the ice field was off by a couple of miles.

MCMURDO

Kilometers.

KLARA

The cargo loads were either burnt like toast, or splattered all over the landscape like a baby throwing his toys out of a buggy.

MCMURDO

And you get a big F for the ship, it blew up, and caught fire, burnt up all the food, and...

KLARA

You pretty much killed us.

MCMURDO

But the satellites are working fine!

KLARA

Yay.

MCMURDO

We're trying to load up a big supply of fuel and oxygen for when Dobby and Schmidt get here.

KLARA

And some crops. And we found the ice field for you, you're welcome!

MCMURDO

I think you get one more broadcast out of us, before, you know...

KLARA

Then you're on your own. Gagarin out.

Back in the habitat, the girls are watching an interview they gave before flying off. Onscreen:

REPORTER

This might be a big ask, but what happens after Mars?

KLARA

We're astronauts, we all have dreams. Sona and Palma, top two pilots on the Mars run, haven't decided who's Number One. Sanyati retires to the biggest farm on Mars. Baba, back to Russia to kiss all the girls and build new rockets. Me and Mouse may want to do Antarctica again before the whole damn thing melts away.

In the habitat:

MCMURDO

We were going to be really cool people before we died. We were going to have lives.

EXT. OUTSIDE THE MAIN HABITAT - NIGHT

Explosion. All except Baba and River come running. They find River on the ground. They drag him inside.

INT. MARS HABITAT SPACE - DAY

MCMURDO

Where's Baba?

KLARA

Come on, bring the kit.

MCMURDO

Even when we find him, his suit must have blown out, by the time we do anything he'll be dead.

SANYATI

She's right.

KLARA

I see blood everywhere.

SANYATI

Don't do anything heroic. Internal bleeding and I don't hear so good. Listen.

(MORE)

SANYATI (CONT'D)

Don't worry about the explosion, it was just an extra tank. Stupid, really.

KLARA

River!

SANYATI

You could eat me you know.

KLARA

River!

MCMURDO

Still wouldn't buy us enough time. We'd never do that anyway.

Sanyati lays there. The reality of imminent death sinks in.

SANYATI

Tell them we can't grow potatoes yet, soil isn't acidic enough, no carrots or squash or turnips.

KLARA

Don't worry about it!

SANYATI

I do worry. Don't be crying over me. I'm twice your age and my pipes misfire. You're the ones who got robbed at the roulette wheel. I've watched so many men die. So this is what it feels like. I can't say I like it so much.

His features go still. Klara scans the horizon.

KLARA

Poor River. Poor Baba.

MCMURDO

(crying)  
Which way did he go? You name it.

KLARA

God that's terrible.

MCMURDO

Come on, he'd be the first to laugh at it. Laughing at all this, it's about all I got left.

KLARA

I think Baba would rather blow up like a bomb than take one of these pills Becky's making.

She puts her arm around Mouse. Palma approaches and kneels next to River.

MCMURDO

Since we're all trying so hard to look at the bright side?

KLARA

What?

MCMURDO

I always thought that death was sad, because the next thing that happens is that the world forgets you were ever here. If you die, then your kids die, who remembers you after that? Nobody.

KLARA

So what's your point?

MCMURDO

After this mission, nobody will ever forget us. Not ever.

Klara pulls her closer and gives her a squeeze.

EXT. OUTSIDE THE MAIN HABITAT - NIGHT

Becky is carefully running a tube from a large machine to a small tube. The rest of the crew watches.

REBECCA WU

Okay, if the splitter and the Sabatier are both doing their jobs, we got methane.

PALMA

And if we got methane, the other ships get to live. Remember the oxygen level!

Becky lights a flame and holds it to a tube. A few tense moments. A tiny jet of flame leaps up.

REBECCA WU

Both systems working. We did it. Palma, we did it! We saved them!

She puts out the flame and sets down the tube. The team gives her big hugs.

INT. MARS HABITAT SPACE - NIGHT

The Gagarin crew plans the end game.

PALMA

Alright, the ice field, the cave,  
the farm.

MCMURDO

I want to put in my two cents. I  
know this sounds stupid. If Klara  
gets the cold hab, I'm going too.

PALMA

I was going to put you on the cave,  
you're cutting your whole life from  
three weeks to two.

McMurdo takes Penguin's hand.

MCMURDO

If she's in the ice box, so am I.  
When I die, I want to be with you.  
Is that too much to ask?

KLARA

Now she tells me.

MCMURDO

Penguin?

KLARA

I know. Well, you finally spit it  
out. Your timing couldn't be worse,  
could it?

MCMURDO

I thought we had time. A thousand  
nights on the red planet.

Klara holds McMurdo tight. Kisses her forehead.

KLARA

My lips are cracking, sorry.

REBECCA WU

I've been listening to all of you  
being noble. No, I'll give my life  
first, I am Spartacus! I'm gonna be  
selfish and mean.

(MORE)

REBECCA WU (CONT'D)

That last slot gets a one percent chance to survive. I want the lottery ticket. The farm. I've got a husband.

SONA

We all have families.

REBECCA WU

My husband is on the third ship. I could actually see him.

KLARA

You never said anything!

REBECCA WU

We never told anybody. I didn't want to play that card on you.

SONA

But now you do.

REBECCA WU

I really do. I'm sorry, forget it. Let's cut the cards, or whatever --

SONA

Team?

PALMA

Not a democracy. Kid, take the manual, show me you can take that valve junction apart and put it together. If you do that, you get the lottery ticket. Team?

They think.

SONA

(shrugs)

One percent chance.

PALMA

And an extra week to live.

KLARA

Take it, sweetie.

PALMA

Me and Sona in the cave, you girls in the ice field, Wu at the farm.

Wu pulls out a tray of chemicals.

REBECCA WU  
Okay, kids. You know what these  
are.

KLARA  
Capsules.

MCMURDO  
I smell ammonia.

KLARA  
So somebody is cooking..

REBECCA WU  
Cyanide. Two capsules apiece.

She picks up a beaker.

KLARA  
You're not even gonna wash that?

REBECCA WU  
You're afraid I'm gonna get a  
little bacteria in your cyanide?

KLARA  
Oh yeah. Right.

PALMA  
For all you drama queens, we don't  
use these until we finish setting  
up. You got a right to take  
yourself out of the game, but not  
to kill the people coming after us.

Rebecca examines her beaker, and shocks the crew by beginning  
to sing and whistle a jaunty Monty Python tune.

REBECCA WU  
Always look on the bright side of  
life.

The rest of them sing along and then collapse in laughter.

PALMA  
Um, careful with the cyanide.

KLARA  
Why? Seriously?

REBECCA WU  
And the other batch I cooked up.

KLARA

Alcohol!

REBECCA WU

Tonight we get drunk and watch a movie on the computer. Careful, I got a system! Alcohol in the fat tubes, cyanide in the thin ones, don't mix 'em up!

In a short while they are smuggled together around a tiny screen, crying over a movie.

KLARA

My last hangover.

REBECCA WU

I'm having a hallucination. We're in Venice, third bottle of Italian red. Brunello di Montalcino, a nice fat Amarone. One of these days I'll take you there.

PALMA

It's a date.

REBECCA WU

Me and my husband. A bottle of Amarone. That was my signal that romance was in the air for the night.

PALMA

Amarone.

INT. MARS HABITAT SPACE - DAY

Mouse and Penguin make one more video.

MCMURDO

Our last broadcast, the historians will be watching this for years.

KLARA

I sure hope not. For those of you who forgot us, I'm Jacobsen.

MCMURDO

I'm McMurdo, the smart one. We'll run this video every midnight Earth time, and leave it on the computer.

KLARA

Baba and River...

MCMURDO

We lost Baba and River, an explosion. These guys are family, kept us alive. I feel stupid trying to find the words. You folks back home who love Baba and River, all I can say is we loved em too.

KLARA

This is ice we're sucking on, that's our diet now. Vitamin H and Vitamin O. And no calories, girls!

MCMURDO

So we got the machines cranking out oxy and meth for you.

KLARA

You sound like a drug dealer.

MCMURDO

Shut up! Oxygen to breathe, methane for power.

KLARA

You need to build a generator with whatever crap you can find out there.

MCMURDO

We got a Sabatier cranking over at the cave, you'll find Sona and Skip there.

KLARA

Don't worry, they'll wait for you!

MCMURDO

Shut up! God, if you weren't gonna be a frozen dinner in a week --

KLARA

And we got another Sabatier in the ice field, where you'll find me and her in our jammies. Just chillin'.

MCMURDO

We're not even married! Then over in the beanfield Becky's got peas and beets growing for you.

KLARA

Sorry about the beets. Better vegetables - I'm gonna try that on my next mission! Oh yeah...

MCMURDO

We got one rover left, it'll be over by the beanfield.

KLARA

And that poor robot shoveling snow at the cave, he's a trouper.

MCMURDO

We didn't have time to build habitats like we said, cause we kinda died along the way.

KLARA

Well, we haven't died yet.

MCMURDO

We need a whole new verb tense, we will have been ceasing to be.

KLARA

So get out of those ships, build some habs, dig for nitrogen in the soil so you can grow more food.

MCMURDO

Otherwise you'll end up in the same box of popsicles with us. I don't recommend it.

KLARA

We do wish you luck.

MCMURDO

I think we used up all the bad luck this planet has.

KLARA

(arm around Mouse)

We'll be back on sked tomorrow at midnight. Gagarin out.

PALMA

We're saying our goodbyes now. Then we all go out to our stations.

Klara begins to cry.

PALMA (CONT'D)

All three systems running. Splitter pumps oxygen, Sabatier pumps fuel. The cave, the ice field, the farm. We did it. We saved everybody.

KLARA

Almost everybody.

INT. MARS HABITAT SPACE - NIGHT

The remaining crew says goodbye.

PALMA

We all agreed. Short goodbyes.

REBECCA WU

I'll drive you and Sona to the cave, and then Mouse and Penguin out to the ice fields.

She hugs the other four survivors one by one.

PALMA

Let's suit up. You okay to drive?

REBECCA WU

Who else we got?...Skip. Thank you. The sites. All three. We did it.

Rebecca is the last to leave.

REBECCA WU (CONT'D)

Okay, old man. I'm ready for you now. You were so eager to scoop us all up. Just go easy on me, okay? Go easy on all of us. Nice and easy, just...lights out.

EXT. MARTIAN SURFACE - DAY

Rebecca drives Palma and Sona to their hab. They are in their suits. The robot shovels snow.

SURFACE 1

Morning, Miss.

Sona gives Rebecca a hug, and then Palma.

She drives to her own hab.

INT. A SECOND HABITAT - DAY

Palma and Sona prepare to sleep.

PALMA

You're sure you're okay with this?  
It's going to be you and me, from  
here to the end.

SONA

You want to ask my father's  
permission? I don't want to get a  
reputation round town.

PALMA

We had to do the pipes again.

SONA

Yeah, it looks backwards.

PALMA

Here's the water feed and then the  
water splitter. This line takes the  
oxygen to a tank so we can breathe.

SONA

Hurray for us.

PALMA

This takes hydrogen over here, we  
combine it with CO2 from this other  
feed and run it to the Sabatier.

SONA

The Sabatier, makes enough methane?

PALMA

Heat up the hydro and CO2 without  
blowing ourselves up, run the  
methane to a tank way over there.

SONA

So there's our fuel.

PALMA

If I get sick, don't you dare kill  
me in my sleep.

She kisses him.

SONA

I love you, Skip. You were a  
fantastic captain.

(MORE)

SONA (CONT'D)

I don't know how far we would have got without you. Glad a got you for my Move Buddy.

PALMA

You're already putting me in the past tense.

SONA

You know there's no point to safe sex.

PALMA

I am your commanding officer.

SONA

Yes, there's a nasty reprimand on its way from NASA.

She chuckles.

INT. A THIRD HABITAT - DAY

Mouse and Penguin, preparing for the man in black, snuggled in a sleeping bag.

MCMURDO

Thought I was prepared for the cold.

KLARA

We're in the coldest part of the ice field. This is just the beginning. Not only do we die, but we watch our toes die first.

MCMURDO

At least we finished those tanks. Let's do hydrogen and oxygen first?

KLARA

We'll sleep next to that tank, it's less likely to blow us to smithereens.

MCMURDO

Yeah, hook up the methane as the last thing, for after we, you know.

KLARA

Don't want to die in an explosion?

MCMURDO

At least we'd be warm. No, for that last bit, we stick to our plan, okay?

KLARA

We go together?

MCMURDO

Yeah. Just about make this bearable.

KLARA

Love you, Mouse.

She holds her tight and kisses her forehead.

MCMURDO

I love you too.

INT. A FOURTH HABITAT - DAY

Another habitat, another sleeping bag, Wu, surrounded by valves and a radio. Wu on a microphone.

REBECCA WU

Here I am in the lap of luxury, got my oxygen, nice warm room so the valves don't freeze. I'm afraid you're going to get a chilly welcome when you get here. We had a few disasters. I'm the last one alive, empress of all Mars. So give me a nice funeral, everybody get drunk. If my husband is alive... Don't know what I'm supposed to say. I want to go home. Is it okay to say that? I want to go home.

INT. BRIDGE OF THE YANG LIWEI - NIGHT

Abernathy and Poulenc at the radio.

ABERNATHY

Does he know how to run the radio?

PI

You don't know Wu, do you?

ABERNATHY

Just from TV. Big business, hangs around with the president.

PI

Yeah, family, friends, softball team. I was shocked when he joined the program. He signed up so he could give up his whole life, follow his wife to Mars. Now that girl is gonna die.

DAVID WU, a young Asian man, arrives.

ABERNATHY

You're Wu, right?

DAVID WU

What's the matter?

ABERNATHY

Your wife was on the first mission?

DAVID WU

Is she okay?

ABERNATHY

In there.

Wu enters another space and hears the beginning of his wife's radio transmission.

REBECCA WU (V.O.)

Here I am, in the lap of luxury, got my own oxygen...

ABERNATHY

So how tough is this guy?

PI

Find out in a minute.

Wu reemerges.

DAVID WU

So we can save them?

ABERNATHY

We're gonna try but...brace yourself. She came on midnight last night, we're gonna try again tonight. Want to man the radio? I'll help you.

DAVID WU

Thanks.

INT. BRIDGE OF THE YANG LIWEI - NIGHT

Wu at the mike.

DAVID WU

This is the Yang Liwei calling the Gagarin on the night sked.  
This is the Yang Liwei calling the Gagarin. All hands, any survivors.  
Beck, this is Wu. We heard you last night. We're on our way.  
Becky, come back. We're coming to help.  
Beck, this is Wu. It's David.

Silence.

DAVID WU (CONT'D)

Try tomorrow?

INT. CONFERENCE ROOM - DAY

We're back to the future, Kiel talks to the heirs of Gagarin, the other captains, and the rest. Spanner Head is a wreck.

NOOR

So the Gagarin crew saved the whole colony.

KIEL

Without them, everyone on the last two ships would have died, and this colony never would have been built.

NOOR

When Earth went to hell, our ships wouldn't have been there to help.

KIEL

Everyone on both planets would be dead. So you seven, the heirs of Gagarin. Commodores decided that when we launched our second colony, you would make the decision.

NOOR

Do we go exploring again?

KIEL

On earth, the sea swallowed three million ships and Amelia Earhart. Natives killed Magellan and Captain Cook.

(MORE)

KIEL (CONT'D)

Polar bears attacked the Vikings  
and Columbus lost an entire ship.  
Mount Everest devoured 300 people  
and Antarctica a thousand.  
Space has been killing our sailors  
for 700 years. We go exploring,  
people are probably going to die.  
Again.

SOFIA

How would we do it?

KIEL

One reason why the Gagarin failed  
is supplies. They sent a lot of it  
in unmanned ships, they crashed all  
over the map. And the Gagarin hold  
had too much cargo all in one  
place, and it all burned up.

SOFIA

So this time...

KIEL

If we go, we send two manned ships  
first, with the supplies. Me and  
Invergordon. We need pilots who  
excel at landing ships on target,  
and unfortunately you...

SPANNER HEAD

My landings are a mess. I get it.

KIEL

We deploy our loads, get the  
machines working, send the all-  
clear, then you come. Jupiter takes  
eleven years to circle around.  
Gordon and I go when Jupiter is  
still way out ahead of Mars, so we  
have time to get there, deploy, and  
radio back.

He points to a big map on the wall showing the orbits of Mars  
and Jupiter.

SOFIA

I see what you're doing.

KIEL

Then you go when Jupiter is over here, rendezvous when Jupiter is ahead of us, spend a few months building the station, and come back just as the planets sync up.

SPANNER HEAD

We wait for the signal from you. If things go wrong for you and Gordon -

SOFIA

We don't go?

KIEL

You do go, to save us. Take off the miners and the heavy loads, round up a rescue team, rig for top speed. Come save my neck.

SPANNER HEAD

I don't even know whether I'm running a construction mission or a rescue mission?

KIEL

You would need to practice both.

SPANNER HEAD

I would want my old crew. They're good miners, they can help blast out the space. Sofe? Navigation?

SOFIA

I could rewrite our charts for the whole solar system. If you want me?

SPANNER HEAD

First you need to get us there alive. I want Noor too, this whole thing is about digging caves, she knows more about climbing caves than anyone on Mars.

KIEL

She's blind.

SPANNER HEAD

And she's coming.

Spanner Head pulls Noor aside.

SPANNER HEAD (CONT'D)

I need you to be honest. How much improvement in your vision?

NOOR

I got tunnel vision and I have no depth perception. I need to concentrate, and it gets worse when I'm tired. But I don't need the cane much, and I can see color now!

SPANNER HEAD

Can you use the computer?

NOOR

I still suck at it.

SPANNER HEAD

That's Job One. If you can beat that, you can help Sofe and Annie to map your cave. Your own cave to play with. If they let us.

KIEL

Everyone, quiet. This mission is special. We're leaving this to the seven heirs. Are we ready to go to Callisto, or not?

SPANNER HEAD

Well, what do you think?

WOMAN

You're a pilot, you went to Earth. We want to hear what you think.

SPANNER HEAD

The first time the human race tried this, it was a disaster. But we've faced setbacks before. I vote yes, and I'm willing to risk my own neck on it.

WOMAN

You'll fly the mission?

SPANNER HEAD

Yeah.

WOMAN

Then I vote yes.

Hands go up. Cheers. Sofia approaches Spanner Head.

SOFIA

Alright, I'm with you for this one.  
The Becky Wu story made me cry.

SPANNER HEAD

Me too.

SOFIA

But what happens after that?

SPANNER HEAD

You're assuming we both survive  
this trip. Becky Wu didn't.

INT. CONFERENCE ROOM - DAY

Kiel, agitated, hops from one computer screen to the next.  
Sofia is amused.

KIEL

I'm gonna check the load in your  
cargo hold myself, that's what  
killed the Gagarin team.

SOFIA

Jesus, Kiel, relax. I'm gonna get  
you drunk tonight, I don't care if  
you're flying tomorrow.

KIEL

Double down the hazardous loads,  
spread out the heavy gear so this  
ship doesn't buck around like a  
horse. Sofia, you got through all  
that material on navigation?

SOFIA

You really want me to do the  
chapter on traffic control? Unless  
the Daleks and the Cybermen show  
up, we're gonna be the only ship  
out there.

KIEL

Fine.

SOFIA

And docking, again? Who are we  
docking with?

KIEL

Practice anyway. And drill Spanner Head on her landings, she's a catastrophe. You sure you don't want the robots?

SOFIA

Not this time, I'm babysitting enough gear already.

KIEL

And check all your cameras.

SOFIA

Kiel! What the hell got into you?

KIEL

Sofoe, this is what it looks like when you send your friends on a billion-mile snipe hunt.

SOFIA

It's only half a billion and you're going too. Go say goodbye to Spanner Head. You make her cry, I kick your ass. Give us a kiss.

He does.

EXT. LAUNCH PAD - NIGHT

Astronauts board a well-weathered modular space vessel, the Saint Patrick.

INT. CONFERENCE ROOM - DAY

More cheers as they watch the astronauts board their vessel.

INT. CONFERENCE ROOM - DAY

Spanner Head, Sofia, Noor and sailors look at a computer.

NOOR

They called it a minor earthquake.

SOFIA

A minor earthquake.

NOOR

Some cargo containers were trashed.

SOFIA

The big splitter was damaged. The only way the mission succeeds is if somebody stays behind on Callisto to keep the splitters going.

SPANNER HEAD

But if he stays, we have to go get him. We're committed to go all the way. Are we ready to do that?

SOFIA

The cargo bay is loaded with the exploration package, not the rescue package.

SPANNER HEAD

So improvise. Mix and match.

SOFIA

I know you wanted four antennas and four satellites, looks like three and three.

SPANNER HEAD

Is that enough?

SOFIA

It is if nothing else goes wrong. Hey, the guy who was left behind, what's his name?

NOOR

Xi.

SOFIA

Engineer, wife is pregnant?

NOOR

That's the one.

SPANNER HEAD

Our navigation is shot to hell now.

SOFIA

If it wasn't for the lost man, this would be easy. Jupiter's the biggest hunk of rock in space, easy to find.

SPANNER HEAD

But we got to get the math right, get there before that man dies.

SOFIA

Okay, one more time. We have a plan to explore Callisto and a plan to run a rescue mission. We don't have a plan to do both. Last chance to wave off.

They look at each other.

SPANNER HEAD

Are you joking? Let's do it.

SOFIA

You need to run nitro fuel, crank the engines all the way. This ship wasn't designed to go that fast for that long. Stuff is gonna break.

SPANNER HEAD

What's gonna break first?

SOFIA

We won't know until it breaks.

SPANNER HEAD

Pack some more rock and roll tape.

INT. BRIDGE OF THE SAINT PATRICK - NIGHT

Spanner Head and Sofia fly the ship through an asteroid belt; BANGING heard regularly. Spanner Head sits in the left chair with her hand inserted into a rudder box between the two pilot chairs. Sofia sits on the right watching a monitor.

SOFIA

Asteroid belt is fighting us. There was a collision, lots of debris.

SPANNER HEAD

New trajectory, we're not supposed to be here. Big rocks?

SOFIA

The bigger ones are in this patch in the center.

SPANNER HEAD

Plot me a course to go under all that crap: if the little rocks bang us around, that's just too bad.

SOFIA

We'll be way off course.

SPANNER HEAD

We got a man out there. We're committed.

Spanner Head steers through a maze of small boulders. There are a few bangs, and then one hits the front window assembly, reducing visibility.

SPANNER HEAD (CONT'D)

Turn on the forward camera and turn it toward me! I can't see --

SOFIA

Here -

SPANNER HEAD

I can't see -

SOFIA

You need to slow down -

More bangs.

SOFIA (CONT'D)

I think that's the worst of it.

SPANNER HEAD

For the rest of the trip, I need to use the camera. Can you rig something for me?

SOFIA

You don't want me to just climb out there, fix your window?

INT. BRIDGE OF THE SAINT PATRICK - NIGHT

Spanner Head steers. It's very noisy. The radio comes on.

KIEL (O.S.)

Come in, Saint Pat. This is Kiel.

SPANNER HEAD

Kiel? What are you doing here?

KIEL (O.S.)

I swung my trajectory over your way just a bit.

SPANNER HEAD

Just a bit? It sounds like you're right on top of me, you're gonna be a month late getting home!

KIEL (O.S.)

I heard about Xi. I assume you're just throwing out the plan and making stuff up again. What the hell is that noise?

SPANNER HEAD

We're doing runs on nitro fuel.

KIEL (O.S.)

Check your chemistry, fuel flow, igniters, and watch the vibration, it can blow apart at high speed.

SPANNER HEAD

Relax.

KIEL (O.S.)

Are you boning up on the drills?

SPANNER HEAD

Relax! Next we do safety drills. We already drilled the experiments, dirt samples, Jupiter mapping. When we slow down over Callisto we drill the EVAs.

KIEL (O.S.)

Keep a close watch on radiation.

SPANNER HEAD

I'm gonna lose your signal soon. Kiel, it was nice to hear your voice, it was sweet, but relax.

KIEL (O.S.)

I get paid to worry.

SPANNER HEAD

I love you too, sweetie. Now shut up and go home.

INT. OPS CENTER OF THE SAINT PATRICK - NIGHT

Next to the bridge is a pod loaded with well-worn, rehabbed computer equipment. Spanner Head and Sofia pore over maps.

SPANNER HEAD

Cameras okay?

SOFIA

Wide camera, narrow camera,  
infrared, ultraviolet, polarimeter,  
everything's cooking.

SPANNER HEAD

I need to see landing sites in real  
time, before I try to land.

SOFIA

I can eyeball it -

SPANNER HEAD

I'm the pilot, I need to follow the  
camera and compare it to your  
mapping, I need you back here too.

SOFIA

Who flies? Engineers are prepping  
gear, they're behind already.

SPANNER HEAD

Noor! You're with me!

INT. BRIDGE OF THE SAINT PATRICK - NIGHT

Spanner Head drags the terrified Noor to the bridge.

SPANNER HEAD

Take the headset, give me your  
hand.

She slices Noor's left hand and she shrieks.

SPANNER HEAD (CONT'D)

That's how you access the computer.  
Stick your hand in the rudder box,  
and steer on my command.

NOOR

Are you insane? I'm -

SPANNER HEAD

You're blind, I know. We cross-  
train everybody, you're the only  
one who never learned to fly the  
ship. So now you can.

NOOR

No, I can't --

SPANNER HEAD

Listen, this will help me. If Sofie and I can compare maps all at once, we can save a whole day setting up the landing.

Noor sits in the right chair on the bridge and takes the rudder box. She squints at the box, hard.

SPANNER HEAD (O.S.) (CONT'D)

Squeeze your hand, the engines will fire up.

She does and the ship lurches forward. Sofie bangs her head on a bulkhead.

SPANNER HEAD (O.S.) (CONT'D)

Careful, the fuel we're running is pure lightning! Open your fist, turn 45 degrees portside. Yes! Left. Now straighten out, pull back. That's it! Don't move! Now all ahead just a touch.

Noor is crying.

NOOR

Holy crap. I'm flying.

A bit of debris hits the ship. Noor flinches and laughs.

INT. OPS CENTER OF THE SAINT PATRICK - NIGHT

SOFIA

That underground hole. Just close enough to the surface, just close enough to the water underneath.

SPANNER HEAD

Nice hard rock so it won't fall apart when we start hammering.

SOFIA

Where do we land?

SPANNER HEAD

Yeah, that one, nice flat spot, not too far from the rendezvous. Okay, kid, you can pull out now. When we get home, show Kiel your hand, tell him you flew us the whole way.

Noor heard laughing.

NOOR  
You're insane!

She enters.

SOFIA  
Sweetie, we found you an awesome  
cave!

NOOR  
Want me to land this thing?

EXT. SURFACE OF THE MOON CALLISTO - NIGHT

The ship lands. Nearby is a suited astronaut, an Asian man  
named Xi, who laconically holds out a thumb.

INT. BRIDGE OF THE SAINT PATRICK - NIGHT

Spanner Head, Noor and Sofia look at a screen. Spanner Head  
is laughing, putting on a headset.

NOOR  
Dammit, I can't see!

SPANNER HEAD  
Got us a hitchhiker. Saint Patrick  
to Xi.

XI  
This is Xi, got you on visual.

SPANNER HEAD  
Outstanding. We're bringing a  
relief engineer to babysit your  
water splitter. Get you onboard,  
get you a shower and a bed.

XI  
Even better.

SOFIA  
Got video messages from your  
family. Your wife's pregnant, what  
the hell are you doing here?

INT. REAR COMPARTMENT OF THE SAINT PATRICK - NIGHT

Spanner Head and Sofia await Xi.

SOFIA

Remember, we only got one third normal gravity, don't get all silly, get used to it first.

Xi enters an airlock and removes his helmet. Spanner Head smiles at him.

SPANNER HEAD

Wow, you smell like vomit. Get this man to the shower!

Xi heads to the next compartment.

SOFIA

Hey, hang on.

SPANNER HEAD

What?

SOFIA

Got Captain's Shoulder?

Sofia grabs Spanner Head's right shoulder with both hands and roughly works it back into place.

INT. OPS CENTER OF THE SAINT PATRICK - NIGHT

Spanner Head, Sofia, Noor, Xi look at a computer. Spanner Head puts on her headset.

SOFIA

We need a habitat, and we need all the big gear to work, the dishes, the satellites. If any one of them goes down, we're done, we go home.

SPANNER HEAD

We need to start watching out for ice. Team One, suit up. Find that passage to the cave. Team Two, surface, bring out the antennas and the water reclaimer.

XI

That cave will be the hardest rock to dig through.

SOFIA

And we can't use explosives. It's all hammers and muscle.

XI

And we need a place to clear out  
all the busted rock.

SPANNER HEAD

Team One? On speaker.

TEAM LEADER (O.S.)

Nice big cavern, nice and warm  
compared to the surface, and the  
best part...I'm standing in a puddle.

SPANNER HEAD

It leaks?

TEAM LEADER (O.S.)

We're close to the underground  
ocean. We can run pipes down there,  
get the water.

SOFIA

We need to make the hole wider  
because we can't go deeper, we'll  
hit water, big leaks can kill us  
all. If we can't clear out 1000  
cubic meters, the next crew won't  
have enough space.

XI

We had landslides. Need to double  
up on the walls in a few places.

SPANNER HEAD

Can we make the hab big enough?

XI

It'll be close. We need more  
construction materials.

SOFIA

My man Xi, you ready to get back at  
it, the water splitters?

XI

Sure.

SOFIA

(to Noor)

We need you to get engineers back  
and forth from the cave to the  
surface.

XI

But she's blind.

NOOR

Half blind. I've been climbing in caves all my life. Once you get in there you're blind anyway.

SOFIA

We already put static ropes all up the tunnel, you can follow it no sweat. You ever hear Beethoven's Fifth? That will help you synch up the C scale in your head.

XI

Why??

SOFIA

We put transmitters in the tunnel, eight of them. C D E F G and all the way up. When you get high C you know you're at the surface.

Noor and an engineer make their way up the tunnel. The emitters change pitch as they go.

XI

We're between B and C, we're close.

SOFIA

We need to get all the antennas talking to all the satellites. Next trip, we swap all the batteries.

XI

Beethoven's Fifth?

SOFIA

We needed something in C. It was either Beethoven or Silly Love Songs.

XI

Silly what?

INT. A CAVE - NIGHT

Spanner Head and Sofia, in pressure suits, watch miners hammering at the walls to enlarge the cave. Two miners are drilling carefully into the floor. Overhead is a roofing structure made of plastic.

SPANNER HEAD

Why are we drilling so deep?

SOFIA

We have a submarine. Below the rock there's an underground ocean, it may have alien life. We punch through to the water, launch the sub. A year from now, we bring it back in, see what it found.

SPANNER HEAD

Okay, hammers and drills down.

Crew members unfold a massive piece of fabric and attach a hose to one end. Gradually it inflates into a huge balloon-like tube, two meters by four meters by ten meters, with hatches at either end and one side.

A crew member enters the tube through one of the hatches, checks a device, and removes his helmet. Sofia follows.

CREW MEMBER

Pressure holding. Nice job.

SPANNER HEAD

First habitat. We got it!

SOFIA

Not so fast. First bring the light stuff, beds and tables, slide them in the back. Then the heavy stuff in the front, food, air handlers, water splitters, the experiments.

CREW MEMBER

Fire up the computers and test em.

SOFIA

The hell with the computers, test the toilets, the more the better!

INT. A CAVE - NIGHT

It's dark in one of the habitats. An alarm goes off. An engineer sleepily rolls out of bed, puts on a mask, and secures all three hatches connecting the tube to the adjoining tubes.

Lights come on, the alarm goes off. The engineer is busy putting masks on two other people asleep in the tube.

SOFIA

(entering)

Twenty seconds. You were slow.

ENGINEER  
Middle of the night.

SOFIA  
People die in the middle of the  
night.

ENGINEER  
We're all exhausted.

INT. AIR LOCK - DAY

The team has built a hard-wall air lock. Eight astronauts are suited up. Spanner Head and Sofia are suited up also.

SPANNER HEAD  
Everybody pair up, check power,  
water, oxy, comms. Finally, hard-  
shell airlock. Everybody checked  
out? Let's see hands! Okay,  
depressurizing in 5, 4, 3, 2...

An astronaut opens the outer hatch and the other astronauts file out.

SPANNER HEAD (CONT'D)  
See you in three hours, don't foul  
your relief tubes!

Spanner Head and Sofia cross into the next pod which is not hard-wall.

SPANNER HEAD (CONT'D)  
And the emergency hatch is ready?

They look at a long pouch hanging horizontally from the wall.

SOFIA  
I'm installing it tomorrow. Big  
enough for two, in case somebody's  
hurt. Roll into the slot, seal it,  
pop em back into the hab, right  
next to the first aid station.

SPANNER HEAD  
I don't know. Could you live in a  
tube like this for eleven years?

SOFIA  
Maybe a throw rug, wet bar.

They laugh.

SPANNER HEAD  
It'll get better.

INT. A CAVE - NIGHT

Xi and Sofia poke around. Spanner Head.

SOFIA  
You found leaks?

XI  
Fourteen.

SOFIA  
If we hold the loss at one  
thousandth of a percent, we're  
there.

XI  
And where's our pressure?

SOFIA  
99.9996. NOW we got it.

XI  
Callisto Outpost to Mars, 1000  
cubic meters of hab, pressure  
holding, send us a crew!

Cheers.

SOFIA  
Seven hundred years ago, Becky Wu  
was building a cave like this on  
Mars. She had a week to live.

SPANNER HEAD  
Dammit, don't make me cry.

INT. A CAVE - NIGHT

Spanner Head, Sofia and Xi monkey with computers and cables.

SPANNER HEAD  
And none of this is running off the  
ship power or data?

SOFIA  
Nope. The baby bird is ready to fly  
on its own. All three dishes talk  
to all three satellites. And then  
Mars.

(MORE)

SOFIA (CONT'D)  
 (punching buttons)  
 Dish One to Bird One. Dish One to  
 Bird Two. Dish One to Bird Three.

She whacks a computer. Three CHIRPS on the radio. More buttons.

SOFIA (CONT'D)  
 Dish Two to Bird One. Dish Two to  
 Bird Two. Dish Two to Bird Three.

Three CHIRPS.

SOFIA (CONT'D)  
 Dish Three to Bird One. Dish Three  
 to Bird Two. Dish Three to Bird  
 Three.

Three CHIRPS.

SOFIA (CONT'D)  
 Dish One, Ground Station. Dish Two  
 to Station. Dish Three to Station.  
 We got all three dishes down here  
 in the hole. Now the grand finale.

She takes a deep breath, and for the first time, picks up a microphone.

SOFIA (CONT'D)  
 (more button pushing)  
 Dish One to Mars. Dish Two to Mars.  
 Dish Three to Mars. And now we  
 wait.

INT. A CAVE - NIGHT

Continuation, hours later.

SOFIA  
 Wake up, it's time.

RADIO VOICE 1  
 This is Mars calling Dish One.

A POPPING NOISE, NEW VOICES.

RADIO 2  
 Mars for Dish Two.

RADIO 3  
 Mars for Dish Three. You got the  
 whole set, kids.

Cheers.

SPANNER HEAD

Mars, this is Callisto. Got a shopping list for the next ship, new bird, dish, supports for the hab walls, got a busted water splitter.

SOFIA

Everybody get on the horn, call your families. Hugs and kisses. Tell the Gagarin people we made it. One more week and we fly home!

EXT. SURFACE OF THE MOON CALLISTO - NIGHT

Three dishes have been erected on platforms. On one platform, a discarded tube rolls to the edge and then falls to the ground. All around the dishes are the debris discarded when the engineers were erecting the dishes: tubes, wires, supports, discarded electronic bits. The site looks trashy.

INT. CONFERENCE ROOM - NIGHT

Back on Mars, rapturous welcome for the Saint Pat crew and Xi.

SPANNER HEAD

Where's Kiel?

WOMAN

He's late.

SPANNER HEAD

He went off course on the return leg, I ragged him out for it. What's the sked - he was supposed to be here long before us -

WOMAN

We haven't heard a thing.

SPANNER HEAD

Oh no no no. Where's my old radio?

INT. OBSERVATION TOWER - NIGHT

Spanner Head sets up a battered radio in the tower. She's worked this radio here many times before.

She pulls out a piece of string, ties one end to a nail in the wall, stretches out the string, marks the end of it with a rock.

SPANNER HEAD  
North is still north.

She picks up a microphone.

SPANNER HEAD (CONT'D)  
Mars calling Kiel.  
Mars for Kiel.  
Kiel, it's me. Just pick up my  
signal, I can get you home.

Sofia and Xi arrive.

SOFIA  
Here she is.

XI  
You know what they call this place?

SOFIA  
Shut up! What the hell is the  
matter with you?

SPANNER HEAD  
Widow's walk. Where women wait for  
lost sailors. Twenty generations of  
sailors, I know the widow's walk.  
Never expected to be here for -

NOOR  
You're exhausted, I got the next  
shift.

SPANNER HEAD  
You can't manage the radio -

SOFIA  
Sure she can. Here's the emergency  
wave, just put on the headphones.

Continuation. Spanner Head sleeps.

NOOR  
Wake up! I hear something!

SPANNER HEAD  
Kiel!

NOOR  
Take the headset?

SPANNER HEAD

No!

Cat-like, Spanner Head jumps up to the window sill so she can get a better view of the sky.

SPANNER HEAD (CONT'D)

Tell him to point toward the sun,  
and tell me which constellation is  
to the left, and how many degrees.  
Rough guess is fine. And start the  
clock, we can time his signal.  
Sofe, help me map this!

NOOR

Kiel, look at the sun, how far over  
is the first constellation to the  
left?

SOFIA

And, clock.

Sofia punches a button on the radio and the number 1 pops up.  
With a quick cut, the counter is now at 67 (or you could  
actually wait the 67 seconds).

NOOR

He said Sagittarius is twenty  
degrees portside of the sun...

SOFIA

Which means he's on this arc here.

NOOR

And time lag is 68 seconds.

SOFIA

So he's on this arc here. And the  
intersection is...

SPANNER HEAD

He needs to head straight for the  
sun then. Sofe?

SOFIA

Yep, straight at the sun.

NOOR

(squints at a screen)  
Kiel, head into the sun, maybe five  
degrees starboard, come onto this  
wave every night at midnight, we  
get you a better bearing. We got  
you!

SOFIA

It's almost like you've done this before...

Spanner Head smiles.

SOFIA (CONT'D)

The Siren! The story is true! You saved Hector, his whole crew! You didn't tell me!

SPANNER HEAD

I almost got thrown in jail for it. I was quite the little criminal. So tomorrow I'll --

SOFIA

Are you kidding? We'll all be here at midnight.

SPANNER HEAD

Thank you.

SOFIA

I got laid with the Siren.

INT. CONFERENCE ROOM - DAY

The place is packed.

Kiel enters and gives Spanner Head a massive hug.

SPANNER HEAD

Crap, I'm gonna strangle you! Let me wipe my face.

KIEL

You saved my neck again.

Shortly thereafter Spanner Head, Sofia and Kiel are drinking moonshine.

SOFIA

Jupiter and Callisto circle around in eleven years. Either we find people willing to stay there eleven years, or we build faster ships.

KIEL

If there's an emergency, we can send out a ship special, but it's still a year round trip at top speed for the rescue team.

SPANNER HEAD

Kiel, a year ago you asked me to be your representative back on Earth.

KIEL

And you said hell no...You're willing to give up flying?

SPANNER HEAD

I want to have a baby.

KIEL

So you don't have donors yet?

SPANNER HEAD

You volunteering?

KIEL

There are worse jobs out there. ...Jealous?

SOFIA

Do I wish I had a penis? Um, no. Go make a baby with Spanner Head before you get lost again.

Xi approaches with a paper report.

KIEL

Xi, thanks for coming.

XI

Good to see you again. Did you see this?

Xi gives Kiel the report to read.

KIEL

You finished?...Wow. Carbon, Silicon, iron, water. We don't have radiation levels like Europa. And the big question, earthquakes?

XI

Nope. It's stable enough. Believe me, I checked.

KIEL

That means we can live there. We can build colonies there, just like here! We have a whole new planet!

Cheers!

XI

Technically it's just a moon.

KIEL

Whatever! Second thing. You know the rule on forward bases? If an exploration team goes to a new site and builds a permanent base, they get to put their name on it. But only if it's permanent.

XI

So if a team goes to a new crater, and the whole team dies in an avalanche, it doesn't count.

KIEL

We use the same rule in space, you have to stay alive and hand the base over. You were the first one to set up camp on Callisto and you stayed until the Saint Pat arrived.

XI

And I didn't die.

KIEL

Next week we make it official. The base on Callisto is Outpost Xi.

SPANNER HEAD

Congratulations. So...what did you want me for? You need me to vouch for the fact that he was still alive on Callisto when I found him?

KIEL

When we were talking about naming the base, your name came up too.

SPANNER HEAD

Me? I don't need that hole in the ground named after me --

KIEL

No, something else. You know the first base here on Mars, at Elysium?

SPANNER HEAD

Where the Gagarin landed. The whole crew died. Becky Wu, Palma...

KIEL

You know it's Outpost Wu, right?

SPANNER HEAD

After my great great grandfather?  
David Wu? Because he survived.

KIEL

No, it was named after David Wu's  
first wife, Becky Wu.

SPANNER HEAD

The girl on the Gagarin? But that  
wasn't permanent. She died before  
the other ships got here.

And it hits her. Hard.

SPANNER HEAD (CONT'D)

No no no no no --

SOFIA

Sweetie -

SPANNER HEAD

She died!

KIEL

Well, yes and no -

SPANNER HEAD

She was still alive when Abernathy  
landed? Why didn't they save her?

INT. MARS HABITAT SPACE - DAY

We go back in time again, to the arrival of the Shepard and  
the Yang Liwei after the Gagarin disaster. Dobson examines  
equipment; Veles enters.

VELES

Um sir?

DOBSON

What?

VELES

The radio. The Yang, the ship we  
left behind? They made repairs.  
They're coming. Wu is calling for  
Becky.

EXT. MARTIAN SURFACE - DAY

From a considerable height, it is possible to see the scorched and smashed remains of a number of cargo containers.

INT. BRIDGE OF THE SHEPARD - DAY

Dobson observes.

DOBSON

Those poor people. Their gear  
smears all over the mountain.  
Never had a chance.

EXT. FOURTH HABITAT - DAY

Sound of a ship landing. Sound of footsteps. Dobson enters in a pressure suit and removes his helmet. He sees Becky, comatose, with IVs.

TECHNICIAN

She's in a coma. She's shutting  
down.

DOBSON

Becky. Shit. You could have come  
with me, you know. On the Shepard.  
You never gave me a chance. What an  
amazing girl you are.

Sounds of another ship landing.

DOBSON (CONT'D)

Damn, that was quick.

VELES

(entering)

We're a long way from the main hab,  
walk or fly?

DOBSON

Fly.

INT. BRIDGE OF THE YANG LIWEI - NIGHT

Abernathy finds Pi crying.

ABERNATHY

Hey, what's the matter?

PI

You know what we could be walking into? What if the passengers and crew of the Shepard support Dobbie? He must have lied to them. The first day of the colony on Mars could to be a civil war. History of the human race in a nutshell.

ABERNATHY

If we all decided to try to kill each other, it's pretty easy on a cold planet with no air. This planet's already trying to kill the Gagarin team without our help.

PI

It's not like we brought weapons.

ABERNATHY

We're supposed to be a scientific team, best and the brightest. I was hoping we wouldn't need to deal with stupidity and violence the minute we reach Mars. I thought we'd have a chance to start over.

PI

To prove we were getting smarter?

EXT. OUTSIDE THE MAIN HABITAT - DAY

The Yang Liwei lands and its officers, suited, emerge to find the officers of the Shepard waiting. Abernathy, suited, points to the hab.

INT. MARS HABITAT SPACE - DAY

The crew of both ships enter and remove their helmets. They eye each other. A tense silence.

ABERNATHY

Get out there, see if they have anyone hurt. You, Dobson, if you want to survive til tomorrow, you just belt up right now.

Pi enters.

PI

WHERE IS HE?

VELES

The captain?

PI

The man who set us adrift.

VELES

Are you alright?

PI

Some of us made it, some of us didn't. You Shepard people give that man to us, or we're coming for you too. I don't know whether you sat there watching him because you're gutless, but you can't hide in a corner anymore. You can join us, or you can go down with him.

ABERNATHY

Pi, belay that. We're not doing any of that.

DOBSON

What, are you in charge now?

ABERNATHY

Three ships, three captains. Captain of the Gagarin, by now he's dead. Captain of the Shepard, I am removing you from your post and you will probably be tried for murder.

DOBSON

Removing - you're a mathematician!

ABERNATHY

Thanks to you, I am the captain of the Yang Liwei. With Palma dead and you - I wouldn't let you pilot a teakettle at this point - I am the only captain left.

DOBSON

You're in charge of both crews?

ABERNATHY

I am in charge of all of Mars. You Shepard people, anybody got a problem with that? Let's have it out now.

Tense silence. Abernathy looks to Veles.

ABERNATHY (CONT'D)

Pi, pick another sailor, take Dobson to a safe place and secure him. Has anybody done recon yet?

VELES

Not yet.

ABERNATHY

Four teams of two, north south east west, give me a report. Job 1, find any signs of the crew of the Gagarin. You find food or equipment that works you get extra rations.

VELES

Yes, sir.

She gives him a look, and then Dobson.

ABERNATHY

Veles? I suppose with Dobson out of the lineup, you're captain too?

VELES

Spec, we can't have a kingdom with two kings. Should we bring liquor and virgins to your royal throne?

ABERNATHY

I'll settle for water, oxy, meth. And thanks. This could have been messy. For now I give all the commands, but we can't run the whole planet that way.

INT. MARS HABITAT SPACE - DAY

Crew members surround Dobson who is sitting in a corner.

VELES

We're gonna lose people. There's no way this stuff will be enough.

ABERNATHY

So you're saying Dobby was right?

VELES

No!

Pi arrives.

PI

I can't believe what the Gagarin guys did. They gave us just enough to get started. Fuel too. Beans and beets. If they'd crashed out on landing, we'd be dead.

VELES

But we're still in deep shit.

PI

Water is in the ice field, either you bring people to the ice or ice to the people. You need bigger splitters, bigger beanfields.

VELES

Sir, save your sewage, we need to make fertilizer and we haven't found nitrogen yet.

ABERNATHY

But we have a chance.

PI

For now we sleep on the ships. We may have to double up on the bunks.

ABERNATHY

What if someone gets pregnant?

VELES

Oh wow.

PI

First year, we all go on a diet.

VELES

We could just make methane, fuel up and go back to Earth.

Tense silence.

PI

Cap?

ABERNATHY

No. We're staying.

PI

Want to burn the ships like Cortes?

ABERNATHY

I'm pigheaded, I'm not insane.

VELES

What do we do with him?

PI

We can't let him live, he's too dangerous.

VELES

I agree.

DOBSON

You wanted to punish me because I chose who could live or die, and now you're choosing whether I live or die? Maybe you should have been up on that bridge with me.

ABERNATHY

You're can't stay here, they'll kill you in your sleep. You take a rover to the polar ice cap. Alone. Thousand miles thataway. As long as you keep sending methane back to us, we'll keep sending you food. I'll even give you a radio. You can come back in a year.

DOBSON

An earth year or a Martian year?

VELES

You're letting him live?

ABERNATHY

This insane thing he did. He was trying to save lives. That's the kind of thing you do when you're captain.

EXT. MARTIAN SURFACE - DAY

Veles and Pi, in a rover, find the robot, frozen and dead, shovel in hand, surrounded by snow.

VELES

Yep, I think we voided the warranty on this one. Poor guy. Shoveling right to the end.

PI

What the hell happened up there with Dobson?

VELES

He jacked up your motor. I chickened out. He really thought he was doing the right thing.

PI

Is that why you bailed out on being captain?

VELES

Does Abernathy have the makings of a good king?

PI

Spec? He's got more balls than you think. He listens to me. A lot. That was a surprise.

INT. THIRD HABITAT - NIGHT

Abernathy and Poulenc find Mouse and Penguin.

ABERNATHY

Klara and McMurdo.

PI

Careful! Unless I missed my guess, that's cyanide.

ABERNATHY

That, in her hand?

PI

Let me see the bodies. Well, if you ever want to see what true love looks like.

ABERNATHY

True love?

PI

Girl on the left, I can tell, she took her cyanide pills. But when the first girl died, the second girl, her heart just stopped.

ABERNATHY

All by itself?

PI

Died of a broken heart. If anybody ever loved me like that...

She looks up, and Spec is looking at her. They both look down. And then they look at each other again.

PI (CONT'D)

Hey, skip, don't be getting all mushy on me. I gotta hold my shit together for Becky Wu.

INT. FOURTH HABITAT - DAY

Rebecca Wu is in her cot, barely alive. A bucket of water and a cup sit by her cot. David looks at Becky, and for a few seconds, their entire life together plays across his face.

DAVID WU

I need to sit. She's alive?

PI

Matter of opinion. The math says she had no food for a month, two months, but that's impossible. Pneumonia, hypothermia, then coma.

DAVID WU

Is that frostbite?

PI

I don't know. I tried to manipulate her hands, should be responsive. Even Spec was in here, holding her hand. Like a block of ice.

David takes her hand.

DAVID WU

Beck, it's me.

Rebecca doesn't respond, except for her hand, which immediately, firmly, grasps his.

PI

Oh, God, Beck --

REBECCA WU

Amarone -

PI

Did she just --

DAVID WU

Yes, she did. Come on, Beck. She won't let go.

Rebecca takes a big breath and lets it out. Pi does a pulse check. She sees the necklace around Becky's neck. She hands it to David. She fixes Becky's hair and picks up a radio.

PI

Seven minutes past noon, Space  
Vessel Gagarin, end of mission. Say  
howdy to Mouse for me, give Palma a  
big kiss. She was waiting for you.  
What was that word she --

DAVID WU

Amarone.

PI

It's a wine.

DAVID WU

When Becky was feeling romantic,  
she'd bring home a bottle of  
Amarone. Love Potion Number Nine.  
Like tying a sock on the door.

PI

That's the most awesome thing I  
ever heard. So her very last thing,  
she was thinking about -- God,  
sorry --

DAVID WU

Please don't say anything -

PI

God no. I'll clear out if you want.  
Later on, if you want to totally  
lose your shit or get drunk, let me  
know. Someday some girl will buy  
you a bottle of wine.

She leaves him alone with his wife.

INT. BEDROOM - NIGHT

Kiel, Sofia, Spanner Head, a bottle of wine.

SPANNER HEAD

Close the door.

SOFIA

So the new station is Outpost Xi.

SPANNER HEAD

But the cave is Noor's Cave. We just found a new home, we can live there....This came all the way from earth.

SOFIA

Is that wine?

SPANNER HEAD

From Europe. It's Amarone.

SOFIA

I think that's my cue.

She tries to leave.

SPANNER HEAD

No no, have some wine.

KIEL

How do we open it?

SPANNER HEAD

They sent me this. You're the engineer. It's a cork screw.

Sofia looks at it suspiciously, and then smashes the neck of the bottle with a hammer. She sloshes wine into a cup.

Spanner Head takes a sip, and then Sofia. Sofia takes Spanner Head's hand.

SPANNER HEAD (CONT'D)

Here's to Becky Wu. Palma, Mouse, Penguin, the whole lot of them.

SOFIA

You two get to work, get drunk, go make a baby. So you can be a really, really over-protective Dad. Wow, this stuff is -- I bet there are a lot of babies named Amarone.

KIEL

Here's to Becky Wu.

Sofia leaves and Spanner Head kisses Kiel.

FADE OUT.

THE END.