Flight, we have the crew
crossing gantry for
capsule Ingress.

-Roger that.
- Inspired by the late
  President Kennedy,
in only seven years, America
has risen to the challenge...
of what he called
the most hazardous and dangerous
and greatest adventure...
on which man
has ever embarked.

- After trailing the Russians
  for years with our manned
  space program,
- We got a short.

- and after that sudden
  and horrible fire
  on the launch pad...
- Fire in the spacecraft.
during a routine test that
killed American astronauts...

Gus Grissom, Ed White
and Roger Chaffee,

- Get us out of here!
- there were serious doubts that
  we could beat the Russians
to the moon.

But tonight, a mere 18 months
after the tragedy of Apollo 1,
the entire world watched in awe
as Neil Armstrong
and Buzz Aldrin...

landed on the moon.
The big, uh, news came
just a moment ago.

Mission Control gave the
spacecraft permission to go...

for the extravehicular
activity-- that is, for
the walk on the moon--
far earlier
than anticipated:
9:00 p.m.
Eastern Daylight Time.

Now the important thing
when you're penetrating
the lunar module...

is your attitude
and your relative speed.

Now let's say this is me
here in the command module,
and this is you.

- All right. Uh-huh.
- In the LEM. This thing
  sticks out here in front,
  that's called the probe.

- Is that true?
- Absolutely.

A-A-And, Tracey, I'll tell ya,
when you feel that thing slide
in, everything's clickin',

it's like no other
feeling in the world.

- Little liquid propulsion.
- What's the big occasion?

Hey, how's it goin'
over there in Mission Control?

Oh, it's a nervous time.
They're pacin' around,
smokin' like chimneys.

Gene Kranz is gonna have
puppies. Jim Lovell.

- Hi.
- This is Tracey.
- How do you do, Tracey?
- This. This is the man.

Gemini 7, Gemini 12, Apollo 8.
- Stop it, Swigert.

They were the first ones around
the moon. This guy did ten laps.

Yeah, with one hand on the
wheel. You guys make yourselves
at home. Hey, Marilyn.

- Jim, where have you been?
- This is the last champagne
  in the city of Houston.
- Very good, very good.
- Right here.
- Everything else all right?
- Everything's on course.
- Looks okay. Hey! Cadet Lovell.
- Hey, Dad.

Put this on ice in the back
with the rest
and make sure it gets cold.

- You gonna get a haircut
  this summer?
- I'm on vacation.

Oh, get a haircut.

- Well, hello there.
- I wouldn't mind bein'
  up there tonight.

God, who wouldn't.
Don't worry. Our day's comin'.

They're not gonna cut
the program before number 14.

- You know my cousin called.
- Uh-huh.

- Asked who we bribed
  to get on Jim Lovell's crew.
- Yeah.

I just told him, uh, they wanted
to make sure he got the best.

Well, they got that right.

- What network do we want?
- Come on, Walter. Look--

- Do a program.
- Come on. Come on.
  Turn it up. Turn it up.

...has, uh, completed, uh,
putting on their spacesuits
and their boots,

- Everybody!
- uh, helmets, and they're
  now donning their--

I really appreciate you all
coming to this dress rehearsal
party for my Apollo 12 landing.
Oh, sit down, Conrad.
- No, but I-I think we should all take a moment...

...to, to recognize the exemplary--

hell, damn near heroic effort...

displayed by Neil Armstrong’s backup for this historic moon walk.

And, of course, his crew.
Let’s hear it for--

- Let’s hear it for Jim Lovell, Ken Mattingly and Fred Haise.
- Let me tell you something.

Come here, Fred.

Oh, there he is. There he is.
Everybody, quiet down.
There he is. There he is.

- Hey, kids!
- Well, we had a good touchdown.

Okay, we can verify the position of the, uh, opening...

I ought to have on the camera.

-What?
- Jim, you think it’s too late for him to abort?

No, no, he-he still has time to get out of there. Just needs somebody to wave him off.

-There he is. There’s his foot--
- Pull up, Neil!
- Pull up, pull up.

Okay, Neil, we can see you coming down the ladder now.

-Okay.
- Boy, look at those pictures. Wow.

I’m, uh, at the foot of the ladder.

The LEM foot pads are only, uh,
depressed in the surface
about, uh, one or two inches.

-It's almost like a powder.
-Armstrong is on the moon.

-Neil Armstrong.
-Okay, I'm gonna step off
the LEM now.

38-year-old American standing
on the surface of the moon.

On this July 20, 1969.

That's one small step
for man,

one giant leap
for mankind.

-His quote was...
-I only go in, uh--

"That's one small step for man,
one giant leap for mankind."

- You're drunk, Lovell.
-Yep. I'm not used to
the champagne.

Me neither.

I can't deal with cleaning up.
Let's sell the house.

All right, let's
sell the house.

They're back inside now,
lookin' up at us.

Isn't that somethin'?

I bet Jannie Armstrong doesn't
get a wink of sleep tonight.

When you were on the far side
on 8, I didn't sleep at all.

I just vacuumed
over and over again.

Christopher Columbus and Charles
Lindbergh and Neil Armstrong.

Neil Armstrong.

From now on,
we live in a world where
man has walked on the moon.
And it’s not a miracle.

We just decided to go.

On Apollo 8, we were so close.

Just 60 nautical miles down, and--

And it was like
I could just...

step out and walk
on the face of it.

I wanna go back there.

Where’s my mountain?

Well, it--

Up there.

It’s, uh, right up by the s--
Okay, you see the, the--

where the shadow crosses
the, the white area there?

That’s the Sea of Tranquillity,
and your mountain’s right there
on the edge of that.

That’s your mountain.
Your mountain, Marilyn.
Mount Marilyn.

I don’t see it.

Well, you gotta
look harder.

You, you, you
look harder.

- While I--
- Oh, Jim.

The astronaut is only
the most visible member
of a very large team.

and all of us, right down to
the, the guy sweeping the floor,
are honored to be a part of it.

What did the man say?
"Give me a lever long enough
and I’ll move the world"?
Well, that's exactly what we're doing here.

This is divine inspiration, folks.

It's the best part of each one of us: the belief that anything is possible.

Things like a computer that can fit into a single room...

and, and hold millions of pieces of information.

Or the Saturn 5 rocket. Now this is the actual launch vehicle...

that will be taking Alan Shepard and his crew...

on the first leg of the Apollo 13 mission.

When are you going up again, Jim?

I'm slated to be the commander of Apollo 14 sometime late next year.

If there is an Apollo 14.

Now, Jim, people in my state have been asking...

why we're continuing to fund this program now that we've beaten the Russians to the moon.

Imagine if, if Christopher Columbus had come back from the New World...

and no one returned in his footsteps.

Attention, all personnel.
Clear level three.
-Clear level three.
- Are there any other questions?

-H-How do you go to the bathroom in space?

Well, I tell you, it's a highly technical process...
of, uh, cranking down the window and looking for a gas station, which, uh--

Oh, here's Deke Slayton.

Deke, you might be able to answer this lady's question better than I.

Deke is one of the original Mercury 7 astronauts, ladies and gentlemen, and now he's our boss.

He hands out the astronauts' flight assignments, so naturally, we kick back part of our salaries to Deke every month.

- How much this month, Deke?
- Uh, Jim, can I have a minute? Something's come up.

Sure, you be--

Uh, Henry?

Hey!

- Anybody home?
- Definitely not--

I'm not being a cheerleader, Mom. You don't understand. I worked so hard on this!

Barbara, maybe I don't understand, but you are not wearing that out in this neighborhood.

- That's the end of it. I don't want to hear any more.
- She's not even wearing a bra.

- You can see everything.
- Shut up!
- Susan!

- Hey, everybody.
- Jim!
- Marilyn, trick or treat.

You know that Easter vacation trip we had planned for Acapulco?
- Uh-oh.
- Well, I was thinking, uh, there might be a slight change in destination.

Really.

Maybe, say, the moon.

Al Shepard's ear infection has flared up,

and we've all been bumped up to the prime crew of Apollo 13.

Straight to the head of the line and the Fra Mauro Highlands.

Six months? You're moving up six months?

- Dad, can I please wear this?
- Sure.

- Jim.
- No! No, absolutely not.

This stinks.

They're not rushing things, are they? I mean, you're gonna be ready in six months?

We'll be ready. Boy, I wouldn't want to be around Al Shepard tonight.

I gotta get over there. We're gonna have to get up to speed on this.

- Go, go.
- I'm gonna walk on the moon, Marilyn.

I know.
Can't believe it.

Naturally it's 13. Why 13?

It comes after 12, hon.

Apollo 13, you are go for pyro arm and docking.

All systems are nominal and on the line.

Okay, S4E is stable.
SLA panels are drifting free.
The drogue is clear.

The docking target
is clear.

Okay, I'm comin' up
on that now. Two, one, mark.

Seventy-five feet.
We're comin' up on docking.

Let's shut down
some thrusters on 'em.
See what he does with this one.

Whoa. Wait a minute.
Uh, I lost something here.

- I can't translate up.
- Houston, we are drifting
down and away.

- Can we just back off and
take another run at this?
- No, no, I got it. I got it.

Let me, uh-- Let me just try
and get it stable here.

- Houston, I'm gonna
reset the high gain.
- I've got the target
back in the reticle.

Okay, we're stable. Go ahead
and recycle the valves.

- Forty feet.
- They're all gray.

Twenty.

- Easy.
- Ten feet.

- Capture.
- That's it.

- Ha! That's it.
- Whoo! Sweet move, Ken.
  Beautiful, beautiful.

- Gentlemen, that is
  the way we do that.
- Oh, man, that woke me up.

Apollo 13 backup crew,
you're up in the simulator.

- Nice job, Jim.
- That's three hours of boredom...
followed by seven seconds of sheer terror.

Good job, guys. You just won the Christmas turkey.

Nice try, Frank.

- You really outfoxed 'em, brother.
- Yeah, but it wasn't perfect.

- Used up too much fuel.
- Ah, you're above the curve.

Not by much. Listen, guys, I-I wanna work it again.

Hey, we gotta be up with the dawn patrol headed for Beth Page, what, 0700?

- Wheels up at 0700.
- Yeah, I know, but my rate of turn is still a little too slow there.

I really think we should work it again.

- Well, let's get it right.
- Okay. Set it up again, Frank.

Okay, 13 backup crew, it'll have to wait.

Prime crew's up for another run.

Yeah, baby.

Apollo 13, we show S4B shutdown, and all systems are nominal.

Fred, set the S-ban omni to "E," and when you get in the LEM, two forward.

In good shape over here.

- Hey, we got a problem.
- 02 flow high.
- Cabin depress. Repeat: Cabin depress.

- I got no suit pressure.
- Ken, get your helmet on!
- I can't get it locked!
- Houston, we got a master alarm that just ripped a big hole in us!

- Help me! Help!
- We got rapid depress!

Oh, God!

Help!

See now, I thought that if you fired a rocket up into the sky, something bad would happen.

Stars would fall down on you or something.

That's silly. Stars can't fall on us.

Well, you're a smarter kid than I was.

How long will it take you to get to the moon?

Four days.

But that's pretty fast. See, this is the Saturn 4 B-booster, and it shoots us away from the earth... as fast as a bullet from a gun...

until the moon's gravity actually grabs us...

and, and pulls us into...

a circle around the moon.

Which is called an orbit.

Right? Fred and I float down the tunnel into this guy-- the lunar module, the spidery-lookin' guy.

Only holds two people, and it's just for landin' on the moon.

And I take the controls, and I steer it around...
and I fly it down, adjustin' it
here, the attitude there,
pitch, roll, for a nice,
soft landing on the moon.

Better than Neil Armstrong.
Way better than Pete Conrad.

Dad? Did you know
the astronauts in the fire?

Yeah. Yeah, I did. I knew
the astronauts in the fire.
All of them.

Could that happen again?

Well, I'll tell you somethin'
about that fire.

Um, a lot of things
went wrong.
The, uh-- The door.

It's called the hatch.

They couldn't get it open
when they needed to get out.

That was one thing.

And, uh-- Well, a lot of things
went wrong in that fire.

Did they fix it?

Oh, yes. Absolutely.
We fixed it.

It's not a problem anymore.

I can't believe they still have
you doing public appearances.

------------------------------ 04/30/1997,Wed 9:56pm -----------------------------

Well, Henry Hurt was
all over me.

- I know, Jim, but with the
  training schedule this tight,
- I couldn't get away from it.

- they shouldn't be asking you.
- Well, it's, you know-- It's
  for the program, Marilyn.

- It's, you know-- It's NASA.
- Hey! Hey, you're Jim Lovell,
  aren't ya?
Hey, lucky 13!
Right on!

That's the second time it's done that.

So I was looking at the kids' school schedule coming up.

- Yeah?
  - It's a very busy week.

- Well, yeah.
  - I'm thinking about not going to the launch.

Huh.

The kids need me at home, honey.

Marilyn, we've had these kids for a while now.

- They've never kept you from coming to the other launches.
- Yes, but now we have your mother.

- She's just had this stroke.
  - We don't--
  - Oh, Mom's fine.

Honey, it's not like I've never been to a launch before.

The other wives have not done three.

Just-- I just don't think I can go through all that.

I'll just be glad when this one's over.

Well, you're gonna miss a helluva show.

- Jim. See ya. Take care.
- Hey, guys. See you in a few weeks.

Bring us back a moon rock.

So, the number 13 doesn't bother you.

Only if it's a Friday, Phil.
Apollo 13, liftin' off
at 1300 hours and 13 minutes...

and entering the moon's
gravity on April 13.

Uh, Ken Mattingly here
has been doing...

some scientific experiments
regarding that very
phenomenon, haven't you?

Uh, uh, yes. Well, I,
uh, had a black cat,

uh, walk over a broken mirror
under the lunar module ladder.

-It didn't seem to be a problem.
-Yeah, we're also considerin'
a real helpful letter we got...

from a fella said we ought
to take a pig up with us
for good luck.

Does it bother you
that the public regards
this flight as routine?

There's nothin' routine
about flyin' to the moon.
I can vouch for that.

And, uh,

I think that an astronaut's
last mission, his final flight,

well, that's, that's always
going to be very special.

Why is this
your last, Jim?

I'm in command of the, the best
ship with the best crew...

that anybody
could ask for,

and I'll be walking in a place
where there's 400 degrees
difference...

between sunlight
and shadow.

I can't imagine, uh,
ever topping that.

So we have that scheduled for you at 0900 hours tomorrow.

- Uh, that's not gonna work, Walter.
- Why?

Freddo and I are gonna be goin' over the lunar surface experiments tomorrow,

and Ken's gonna be back in the simulator.

We're gonna be goin' over the flight plan tonight as well.

I'm gonna pay a visit to this beautiful machine after you're hard down.

- Thanks.
- Jim. We've got a problem.

I just got some blood work back from the lab.

Charley Duke has the measles.

- So we need a new backup.
- You've all been exposed to it.

- Well, I've had the measles.
- Ken Mattingly hasn't.

You, You wanna break up my crew two days before the launch.

When we can predict each other's moves. We can read the-- read the tone of each other's voices.

Ken Mattingly will be getting seriously ill...

precisely when you and Haise will be ascending from the lunar surface to rendezvous with him.

- Jim, that's a lousy time for a fever.
- All right, now look.

- Jack Swigert has been out of the loop for weeks.
- He's fully qualified to fly this mission.
He's a fine pilot, but
when was the last time
he was in a simulator?

I'm sorry, Jim.
I understand how you feel.

Now we can do
one of two things here.

We can either scrub Mattingly
and go with Swigert...

or we can bump all three
of you to a later mission.

I've trained for
the Fra Mauro Highlands,

and this is flight surgeon
horseshit, Deke!

Jim, if you hold out for Ken,
you will not be on Apollo 13.

It's your decision.

Oh. Let it ring.

No, I gotta--
I gotta take that.

- Oh, why?
- Because I'm on
  the backup crew.

The backup crew has to
set up the guest list and
book the hotel room. Swigert.

Yeah.

Yes. Yes, sir.

Uh, I understand.
Thank you, sir.

Well, I, uh--

Damn.

Medical guys.

I had a feeling when
they started doing all
the blood tests that, uh--

I mean, I know it's their ass
if I get sick up there,
but I mean Jesus!
Oh, boy.

Swigert. He'll, He'll be fine. He's, uh--

He's strong.

It'll be a hell of a mission. One for the books.

You sure about this, Jim? I mean, why don't I go upstairs and talk to Deke?

I'm sure we can work this out.

This was my call.

Must've been a tough one.

Look, I don't have the measles.

I'm not gonna get the measles.

Ken, wait up.

Trajectory's holding steady. We're right on the line.

Okay, we're into program 64.

We're at 05-G, so we're feelin' that gravity now.

Uh, Houston, we are at 400,000 feet, passing entry interface.

-About to lose signal.
- Re-entry data is nominal,

and we have radio blackout.

What's the story here?

I got a corridor light. We're comin' in too shallow.

I'm goin' to manual.

- Houston, switching to S.C.S.
- Roger, 13.

Okay, we're at three G's.

Five G's.
We're comin' in too steep.

I'm gonna stay in this roll, see if I can pull us out of it.

We're at eight G's.

Nine... ten.

- We're at 12 G's.
- 12 G's. We're burnin' up.
- Damn it!
  - I gave 'em a false indicator light right at entry interface.

Even Mattingly didn't get it the first time.

How you feelin', Freddo?

Charbroiled.

- So what happened?
- We came in too steep. We're dead.
- No shit.
  - Yeah, yeah, we were into program 67 there, so--

Okay, guys, we're gonna do this again, obviously, but, uh, give us a minute to get our switches reset in here.

Jim, could we have a word?

Oh, sure, Deke.

We're going to drop off-line and debrief this one on our own.

- So?
- Well, if I had a dollar for every time they killed me in this thing, I wouldn't have to work for you, Deke.

Well, we have two days. We'll be ready.

Let's do it again.

Do it again.
- Mom, there he is.
- Oh, Margaret. Get down, Fred!
  Steven, come here!

- Daddy! Daddy!
- I tell you-- Oh!

We can't go
across that road.

We don't want Daddy to get
any of our germs and get sick
in outer space, right?

- Hey, boys.
- Hey, Daddy!
- Hi, Daddy!

- Not givin' your mama
  a hard time, are you?
- No, sir.

Princess,
you look beautiful.

Jack!

Well, hey, that looks like
Marilyn Lovell.

But it can't be. She's not
coming to the launch.

- I heard it was gonna be
  a helluva show.
- Now who told you that?

Some guy I know.

You can't live without me.

- Okay, folks,
  let's say good night.
- Good night.

- We got a big day tomorrow
  for these guys. Good night.
- We gotta go home now.
  Good night.

You hear about Ken?

Yeah.

One, two.

Stand back, please.
Stand back.

Ah, Guenther Vendt!
- I wonder vere Guenther vent.
- Jim!

- You walk on the moon, huh?
- Ja, ja, we walk and--

and we talk on ze moon.

- All right, you seem to be in good shape.
- Good.

We need a ventilator check-out over here. How you feelin'?
Pretty good?

Good. Might be a little warmer in here, huh?

- How are you today? Ready?
- Good. Yeah.

Oh, geez. Oh!

Oh, God, no!

Oh, no.

- Okay, I want to run a check on this when he's suited.
- Roger.

- Okay, we have the oxygen burn system?
- Check.

- We have the helmet restraint ring?
- Check.

- Okay.
- You check all the pressure gauges?

Communication umbilical. Then, of course, the ventilation is good.

- Fred?
- What?
- Gum.
- Oh, sorry.

Thanks.

I'm gonna give these guys a beautiful ride.

I'm sure you will, Jack.

You need more air?
You want some apple?
- Marilyn, hey.
- Mary.

- Oh, I hate this already.
- You're not just about to pop, are you?

No, I got 30 days 'til this blast-off.

This is for Gene.

Mrs. Kranz has pulled out the old needle and thread again.

The last one looked like he bought it off a Gypsy.

Well, you can't argue with tradition.

- Copy that.
- This is from your wife, Gene.

Oh, thank you, Tom.

I was starting to get worried.

There we go.

- I like it.
  I like that one, Gene.
- Sharp, Gene.

Jim, you're all set.

Very sharp.

Hey, Gene, I guess we can go now.

Save it for splashdown, guys.

Apollo 13 flight controllers, listen up.

- Give me a go no/go for launch. Booster.
- Go.

- Retro.
- Go.
- Fido.

- We're go, Flight.
- Guidance.
Launch control, this is Houston.
We are go for launch.

Roger that, Houston.

Pad leader, what's your status?

We are go for launch.

T minus 60 seconds and counting.

- Fuel pumps.
- This is it.

A few bumps and we're haulin' the mail.

Control, this is Guidance.

We are go for launch.

- T minus--
-15, 14,
13, 12, 11,
10, 9, 8,
7, 6.
Ignition sequence starts.

3, 2, 1.

Ignition!

The clock is running!

We have liftoff!

Houston, we have cleared the tower in 13:13.

Okay, guys, we got it.

Come on, baby.

Come on.

Altitude.
It's on the line.

Velocity
right on the line.

Roll complete.
We are pitching.

Thirteen, stand by for code one Bravo.

Fido, how we lookin'?

Looks good, Flight.
Right down the middle.

We see your B.P.C.
is clear, 13.

Uh, roger.
E.D.S. to manual.

Inboard. Get ready for a little jolt, fellas.

That was some little jolt.

Tower jet.

Houston, this is 13. We've got a center engine cutoff.
Go on the other four.

Roger that, 13.
We show the same.

- Booster, can you confirm that center engine cutoff?
- Roger that, Flight.
Looks like we lost it.
- Fido, what's that gonna do to us?
- Stand by, Flight.

I need to know if the I.U.'s correcting for the number five shutdown.

Houston, what's the story on engine five?

It looks good.
We're still go.

We'll be all right as long as we don't lose another one.

- Roger that.
- Uh, 13, uh, we're not sure why
  the inboard was out early,

but the other engines are go,
so we're just gonna burn those remaining engines...

for a little bit longer.

- Roger that.
- Our gimbals are good.

Our trim is good.

Looks like we just had our glitch for this mission.

- 13, stand by for staging.
- Roger that.

S-2 shutdown.
Ignition.

Thrust looks good,
Flight.

Flight, S4B cutoff in ten seconds.

13, this is Houston.
Uh, predicted cutoff is 12 plus 34. Over.

Coming up on 12 minutes, 34.

- And--
- Ceco!

- Shutdown!
- And that, gentlemen, is how we do that.
Oh, boy.
Hope I can sleep.

- Mom, that was loud.
- Here, hold my hand.

I can't believe
you did this four times.

- The worst part's over.
- It is?

Listen, this doesn't stop
for me until he lands
on that aircraft carrier.

Oh, well, you just look
so calm about it.

Well, if the flight surgeon
had to okay me for this mission,
I'd be grounded.

- Mrs. Lovell! Mrs. Haise!
- Please, can we speak to you
a minute?

- Can we just have a word?
- Can we get a photograph?

- Remember, you're proud,
 happy and thrilled.
- And thrilled. All right.

- W-Well, how you feeling?
- We're very proud and very
 happy, and we're thrilled.

Flight, Booster.
I show S4E shutdown.

T.L.I. is on the money.
Looks good, Flight.

Roger, Fido.

Okay, guys.
We're goin' to the moon.

- Flight, we have reacquisition
 of signal at Hawaii.
- Yeah, Flight, everything
 looks good.

-You can't ask for
 much better than that.
-Okay, uh, Houston, C.N.P. here.

I've exchanged couches with Jim.
I'm in the pilot seat.
I'm, uh, gonna go ahead
and get set for transposition
and docking.

Roger that, Jack.

Freddo, you okay?

Okay, everybody, let's get
turned around and pick up
the lunar module.

Odyssey, you're go for
pyro arm and docking.

Repeat: Go for docking.
We recommend you secure
cabin pressurization.

Roger that.

Okay. We're ready
for C.S.M. separation.

Okay, S.M.R.C.S. isol valves
are all gray.

Okay, Swigert,
command module pilot.

She's all yours.

-Houston, we've got
a good separation.
-Odyssey, the S4B is stable.

-Translation looks good.
-Reconfirm then, 13.

Okay, we're gonna
start to pitch around
to line up with the LEM.

You know, Freddo,
Frank Borman...

was upchuckin' most of the way
to the moon on Apollo 8.

I'm all right.
I just ate too much breakfast.
Let's go to work.

And pitching up.

Pitch rate 2.5 degrees
per second.

Roger, Jack, uh,
we see you pitching around.
- Keep an eye on that telemetry.
- Roger that.

Swigert can’t dock this thing,
we don’t have a mission.

- How’s the alignment?
- G.D.C. Align.

Thrusting forward.

One hundred feet.

Watch the alignment now.

Hey, don’t worry, guys.
I’m on top of it.

-Fido, let me know
when you’re ready.
-Okay, let’s uplink that.

- How we lookin’ Fred?
- We’re not there yet.
  Forty feet.

Twenty.

Come on, rookie.
Park that thing.

Ten feet.

- Capture.
- That’s it.

- Talk back is barber pole.
- Go ahead and retract.

Houston, we have hard dock.

Roger. Understand.
Good deal, Jack.

Let’s start back up
with procedure 17.

Okay, Houston,
we have LEM extraction.

Uh, we copy that, 13.
Now you’re off to
the Frau Mauro Highlands.

- I gotta get out of this suit.
- Uh, Houston, uh, we are, uh,
  ready for the, uh,

beginning of the P.T.C.,
and I think once we’re
in that barbecue roll,
uh, Jack and I will eat.

- Hey, I'm hungry.
- Are you sure?

Ah, I could eat the ass out of a dead rhinoceros.

- We got a smooth one, huh?
- By the numbers so far.

We just ran a minimum load test on the cooling system.

Everything-- Oh, let me clean this up first.

See you tomorrow.

Oh, it's too bad we can't demonstrate this on TV.

What a shame.

Okay. Overboard dump comin' up.

Here it comes, the constellation Urion.

Now that's a beautiful sight.

- Barbara. Barbara, we are going to your father's broadcast.
- No!

I'm never coming out!
I hate Paul!

And no one else can ever play another one of their records again.

She's still going on about the stupid Beatles breaking up?

- They're not stupid.
  You're stupid.
- Barbara. Barbara!

- I know you're in mourning.
- I'm not going, Mom.

- The whole--
  The whole world...
- Dad won't even know if we're there.

is going to be watching
this broadcast, young lady,  
and we are.

Okay, uh, good evening,  
 uh, America.

And welcome aboard  
Apollo 13.

I’m Jim Lovell, and we’re  
broadcasting to you tonight...

from an altitude of  
almost 200,000 miles...

away from the,  
the face of the earth,

and we have a pretty good show  
in store for you tonight.

We’re, uh, going to show you  
just what, uh, life is like...
-Come on, Susan.

-for the three of us here in the  
vast expanse of outer space.  
- Barbara.

Okay, one of the first things  
we’d like to do is...

provide you with the appropriate  
background music.

So, uh, hit it there,  
Freddo.

Hello, world!

That, uh, was supposed to be  
the theme to 2001...

in honor of our  
command module, Odyssey.

but there seems to have been  
a last-minute change  
in the program.

When I go up there on 19, I’m  
gonna take my entire collection  
of Johnny Cash along.

- Hey, Marilyn.  
- Where’s their broadcast?

All the networks  
dumped us.

One of them said we made going
to the moon about as exciting as taking a trip to Pittsburgh.

My son's supposed to be on.

He's in outer space.

This is all the channels we get, Mrs. Lovell.

It's that damn TV Guide again.

Ruthless porters, savage baggage masters--

When I was just a lad of ten

My father said to me

Come here and take a lesson--

Do they know they're not on the air?

We'll tell them when they get back.

Uh, well, if anyone from the, uh, from the IRS is watching,

I forgot to file my, my, my 1040 return.

and I meant to do it today, but, uh--

That's no joke. They'll jump on him.

Well, folks, let's head on down to the lunar excursion module. Follow me.

Now when we get ready to land on the moon,

Fred Haise and I will float through this access tunnel...

into the lunar module, leaving--

EECOM, that, that stir's gonna be on, uh,

both H2 and both O2 tanks, that correct?
...the spacecraft
will remain connected.

Well, folks, as, uh,
you can probably tell,

theAquarius
isn't much bigger than
a couple of telephone booths.

The, uh, skin of the LEM
in some places is only as,
as thick as a couple of,
uh, layers of tinfoil,

and that's all that protects
us from the vacuum of space.

We can get away with this
because the LEM is designed
only for flight in outer space.

Fred Haise.
Renaissance man.

Okay, uh, we'll head
back up the, uh, tunnel now
and back into theOdyssey.

All right, uh, we've
returned to the command--

Stand by one, Houston.

Gotcha.

Uh, Houston, that bang you heard
was Fred Haise on the cabin
repress valve.

He really gets our hearts goin'
every time with that one.

Okay, we're, uh, we're about
to close out theAquarius...

and, uh, return
to theOdyssey.

Our next broadcast will be
from Frau Mauro...

on the surface
of the moon.

So, uh, this is the crew
of the Apollo 13...

wishing everyone
back on earth, uh,
a pleasant evening.

All right.
- Good night.
- Daddy is funny.

You know they might air
a few minutes of it
on the news tonight.

You'd think so.
Come on.
- Eye.
- I thought he looked great.
- Eye.

Well, between Jack's back taxes
and The Fred Haise Show,
I'd say that was a pretty
successful broadcast.

- That was an excellent show, Odyssey.
- Thank you very much, Houston.

Uh, we got a couple of
housekeeping procedures for ya.

We'd like you to roll right
to 060 and null your rates.

Roger that.
Rolling right. 060.

And then if you could, uh,
give your oxygen tanks a stir.

Roger that.

Hey, we've got
a problem here.

- What did you do?
- Nothin'. I stirred the tanks.

Whoa! Hey.

Uh, this is Houston.
Uh, say again, please?

Houston, we have a problem.

We have a main
bus E undervolt.

- We've got a lot of thruster
activity here, Houston.
- What's the story with
  the computer now?

It just went off line.
Oh, there's another
master alarm, Houston.

- I'm checkin' the Quad.
- Christ, that was no
  repress valve.

- Maybe it's in Quad C.
- We've got a computer restart.
- I'm gonna reconfigure the RCS.

- We've got a ping light.
- The way these things fire,
  it doesn't make any sense.

We got multiple
cautions and warnings, Houston.
We've gotta reset and restart.

All right,
I'm goin' to S.C.S.

Jesus! Flight, their heartrates
are skyrocketing.

- EECOM, what's your
data tellin' you?
- Uh, O2 tank two
  not reading at all.

Tank one is at, uh,
725 PSI and falling.

Fuel cells one and three
are, uh--

Oh, boy. What's goin' on here?
Flight, let me get back to you.

- Flight, G.N.C.
- Go, G.N.C.
- Flight, they're
  all over the place.

- They keep yawing
close to gimbal lock.
- I-I keep losin' radio
  signal, Flight.

- Their, their antennae
  must be flippin' around.
- All right, now they're at 22.

- They're gonna have to do it
  manually if they do it at all.
- One at a time, people.
One at a time. 
One at a time. 

EECOM, is this an instrumentation problem or are we lookin' at real power loss here?

It's-- It's reading a quadruple failure.

That can't happen. It's-- It's gotta be instrumentation.

Let's get that hatch buttoned. The LEM might have been hit by a meteor.

- Yep.
- The tunnel's really torquin' with all this movement.

Uh, Houston, we had a pretty large bang there associated with a master alarm.

- Shit, it's main bus A. 
- Main bus A undervolt?

Houston, we have a main bus A undervolt now too. Uh, it's reading 25 .

Main bus B is reading zip right now. Uh, we got a wicked shimmy up here.

EECOM, G.N.C., these guys are talkin' about bangs and shimmies up there.

It doesn't sound like instrumentation to me.

- You are breaking up, 13. 
  We need you to switch... 
- Can't get this hatch to seal.

- to Omni Charlie. 
- Just, just stow it. 
  If we'd been hit by a meteor, we'd be dead by now.

- I'm gonna try to get us out of this lurch. 
- Uh, Houston, you're in the mud.

- Did you say switch to Omni Bravo? 
- Roger that, 13.
- Uh, roger. And the signal strength on the high gain went way down.
- Hey, it's fighting me.

What's the story here, Jack? We keep flirting with gimbal lock.

Odyssey, we need a confirmation. What systems do you have down?

- Okay, Jim. S.M.R.C.S. Helium one.
- I'm having a hard time, Rick. Did you say, uh,

- uh, switch to Omni Charlie?
- A and C are barber pole.

Houston, I'm switching over Quad C to Main A.

-Roger that, 13.
- Okay, Houston. Fuel cell one. Fuel cell three.

We got a main bus B undervolt, cryo pressure, suit compressor.

What don't we have? A.C. bus one, A.C. bus two,

command module computer and O2 flow high.

Uh, I don't-- I don't know. Maybe this is a caution and warning failure.

Houston? We are venting something out into space.

I can see it outside of window one right now.

It's definitely a, a gas of some sort.

It's gotta be the oxygen.

Roger, Odyssey. We copy you're venting.

- Give me an alignment.
- Okay, let's everybody think of the kind of things we can connect.

- Okay now, let's start right back on the beginning.
-Any of you got anything that looks abnormal on your screen?

- Okay, listen up.
- Retro, where are we?
- Quiet down, people.

Quiet down. Quiet down!
Let's stay cool, people.

Procedures, I need another computer up in the R.T.C.C.

I want everybody to alert your support teams.

Wake up anybody you need.
Get them in here.

Let's work the problem, people.
Let's not make things worse by guessing.

Thirteen, this is Houston. We are goin' around the room now.

-We're gonna get you some answers.
-I tell you, we keep spinning like this,

we're gonna keep hittin' the edge of that dead band.

Hey, take a look at the O2 on number one.

Two hundred pounds and falling.

O2 tank two still zero.
Tank one 218 PSI and falling.

-Is that what you're gettin'? Confirm.
-Uh, we're seein' the same, 13.

Can we review our status here, Cy? Let's look at this thing from a, uh,

from a, uh, standpoint of status.

Uh,

what have we got on the spacecraft that's good?

I'll get back to you, Gene.
We're not gonna have power much longer.

The ship's bleedin' to death.

- Flight?
- Yeah, go, EECOM.

Um, Flight, I recommend we, uh, shut down the reactant valves of the fuel cells.

What the hell good is that gonna do?

If that's where the leak is, we can isolate it.

We can isolate it there, and we can save what's left in the tanks and we can run on the good cell.

You close 'em, you can't open 'em again. You can't land on the moon with one healthy fuel cell.

Gene, the Odyssey is dying.

From my chair here, this is the last option.

Yeah. Yeah, yeah, yeah, okay, Cy.

CAPCOM, let's have them close the reactant valves.

Thirteen, this is Houston. Uh, we want you to close react valves...

on cells one and three.

Do you copy?

Are you saying you want the whole smash?

Closing down the react valves for fuel cell shutdown?

Shutting down the fuel cells. Did I hear you right?

Yeah, they heard me right.

Tell them we think that's the only way they can stop the leak.
Yeah, Jim, uh,

we think that closin' the react
valves may stop the leak.

- Did he copy that?
- Do you copy, Jim?

Yes, Houston, we copy.

We just lost the moon.

Okay, Freddo,
shut those down.

Let's see what this does.

If this doesn't work, we're not
gonna have enough power left
to get home.

- Shit.
- Goddamn it.

Uh, Houston, uh, O2
on one is still falling.

Freddo, how long does it take
to power up the LEM?

Three hours
by the checklist.

We don't have
that much time.

Shit.

Okay. Now, Jack, before
the batteries completely
die on us in here,

let's uh, let's
power down everything...

so we can save as much
as we can for reentry.

We have 15 minutes of oxygen,
and that's it. The command
module will be dead.

Okay. Okay, guys, listen up.
Here's the drill.

We're movin' the astronauts
over to the LEM. We've gotta
get some oxygen up there.

- All right, Ed.
- TELMU Control, I want an emergency power procedure.

The essential hardware only. G.N.C., EECOM.

We're gonna be shutting down the command module at the same time.

We'll have to transfer the guidance system from one computer to the other.

- So I want those numbers up and ready when our guys are in position.
- Uh, roger that.

Okay, we gotta transfer all control data...

over to the LEM computer before the command module dies.

Lunar module just became a lifeboat.

Odyssey, uh, this is Houston. Uh, we need you to power down immediately.

You're gonna have to power up the LEM at the same time, so you better get somebody over there.

We already have Freddo in the LEM, Houston.

We've got serious time pressure here, Jim.

You've gotta get the guidance program transferred, and you've gotta do it before you're out of power in the command module...

or you're not gonna be able to navigate up there.

- How much time? Can you give me a number?
- Well, we're lookin' at...

less than 15 minutes of life support in the Odyssey.

We got 15 minutes, Freddo. It's worse than I thought.
Uh, Houston, be aware I've moved from the command module into the LEM.

Now if Jack can't get that guidance computer data transferred before they go dead in there--

- He won't even know which way they're pointed.
- That's right.
- It's a bad way to fly.
- I'll be in 210 if you need me.
- Okay.

Houston, this is 13. Are you, uh-- Are you back with me now?

Aquarius, this is Houston. You now have about 12 minutes to power up.

I can't see any stars.

Man, there's a lot of debris floatin' around out there.

Okay, Houston, I've completed the steps on page 15.

Now I'm ready to power down the computer.

I'm gonna need your gimbal angles, Jack, before you shut down the computer.

- Okay, Jim.
- I need this back to me before they power down.
- Those numbers are really--

All right, all right, I got it, I got it. Hold on.

- Houston, our computer is up.
- Roger that. Stand by, Fred.

Now, Jack, we need to proceed with steps 12 through 17.

Quickly. You're down to, uh, about eight minutes remaining.

Okay. Fuel cell pump's off.
02 fans, tank two off.

Okay, uh, Houston, check me.
I have, uh, completed these gimbal conversions.

but, uh, I need a double-check of the arithmetic.

- Uh, yeah, you can go, Jim.
- Okay, the roll CAL angle is minus two.

Lunar module roll is 355.57.

Pitch: 1678.

Correction.
Pitch: 167.78.

- Yaw is 351.87.
- Stand by. We're checkin' it.

We've got negative visibility in our star field,

and if this paperwork isn't right, who knows where we'll, we'll end up out here.

- Looks good, Flight.
- It's all right.
- Good here.

- He's good, Andy.
- Okay, we'll go on those numbers.

- You're good, Jack.
- Jack, turn off the I.N.U.
- Log 'em in, Freddo.

Switch to S.C.S.
Stand by--

It's a great day in New York, isn't it?
It's girl watchers weather.

- Oh, yes.
- I like those ingenious girl watchers...

who put on Con Edison helmets and dig trenches in the street to get a better view.

But I-- Hey, speaking of girl watching,
First bachelor. He's the kind they say has a girl in every port. He has that reputation.

I think he's sort of foolishly optimistic, though,
taking nylons and Hershey bars to the moon, any--

Did you read that three million less viewers or fewer viewers?

Three million fewer viewers, uh--

Three million fewer viewers watched the, uh, space shot than did the last one.

Uh, I ta-- Uh, um, Colonel, uh, Borman is here this--

An ABC News--

Here is ABC science editor Jules Bergman.

The Apollo 13 spacecraft has lost all electrical power,

and astronauts Jim Lovell, Fred Haise and Jack Swigert...

are making their way through the tunnel to the lunar module, using it as a lifeboat...

so they'll have electrical power for their radios on the command module.

- Apollo 13 is apparently also losing breathing oxygen,
- Slow down.

- And the astronauts may have to use the LEM oxygen supply.
- An electrical failure.

What exactly does that mean?

The emergency has ruled out any chance of a lunar landing...

and could endanger the lives
of the astronauts themselves...

if the LEM oxygen supply, plus whatever is left of the command module’s oxygen,
can’t last them until they can get back to earth.

What do you mean there’s no immediate danger? I-I just heard they’re losing oxygen.

- Can they get back?
- ...has declared that the LEM’s descent rocket engine...

will be used in aborting the mission and getting the astronauts safely back to earth.

Recapping what has happened now:
The Apollo 13 astronauts may be in grave danger.

No, don’t give me that NASA bullshit. I wanna know what’s happening with my husband!

- We wanna switch control to the Aquarius now.
- Roger that.

- Houston, wait.
- And you’re down to about five minutes now, Jack.

- Whoa. The R.C.S. isn’t up yet.
- Houston, be aware: Our R.C.S. isn’t up here yet.

We have no attitude control on Aquarius.

They don’t have control? Did we miss a step here? Control, what the hell happened?

- I don’t know. We just went--
- We gotta get serious about this, guys.

- Hey, we’re all out of whack.
- We’re tryin’ to pitch down, but we’re yawin’ to the left.

- Why can’t I null this out?
- She wasn’t designed to fly attached like this.

Our center of gravity
is the command module.

It's like flying with a dead elephant on our back.

Flight, Guidance, we're getting awfully close to center here.

Aquarius, watch that middle gimbal. We don't want you tumblin' off into space.

Freddo, inform Houston I'm well aware of the goddamn gimbals!

- Roger that, Houston.
- I don't need to hear the obvious.

- I got the frappin' eight ball right in front of me.
- Andy, we're on VOX.

Uh, Aquarius, uh, this is Houston. We got you both on VOX.

You want what? You want us to go to VOX, Andy?

You have a hot mike. We're readin' everything you say.

Sorry, Jim.

And it's only by a very narrow margin that we're going to get...

Lovell, Haise and Swigert back alive.

- Marilyn?
- ...very close, not so much delineated...

- by the words we're hearing, but, I think, by...
- I'm sorry. Jeffrey's calling for you.

the terseness of Craft and the grim lines of Jim McDivitt.

This has been a very close call, and we're not out of the woods yet, not by a long shot.

Jeffrey?

Why are so many people here?
Oh. Well, you know, your, your dad’s flying this mission.

He said he was going to get me a moon rock.

Right.

Well--

Something broke on your daddy’s spaceship,

and he’s gonna have to turn around before he even gets to the moon.

Was it the door?

13, Houston. Uh, we still show that venting pushing you around.

- How you doin’?
- Houston, Aquarius. Uh, we’ve had to learn how to fly all over again, but, uh, we are doin’ better up here now.

Uh, roger that, Aquarius.

- Have ‘em close it out.
- Jack, uh, we can close out your procedure now.

Now, do we know for sure that we can power this thing back up? Uh, it’s going to get awful cold in here.

Copy that, Jack. Uh, we’ll just have to deal with that later.

- Computer off.
- We’re clear.

- We’re goin’ the LEM.
- We confirm shutdown, Jack.

Lunar module now in control.

Roger that, Houston.
This is Odyssey...

signing off.
Freddo, we're gonna have to execute some sort of a burn here. Just a matter of when.

- Did they shut us all down in there?
  - Yeah.

Didn't think we'd be back in here so soon.

Uh, Houston, how far off course do you project we are? Over.

Okay, people, listen up.

Gentlemen.

I want you all to forget the flight plan.

From this moment on, we are improvising a new mission.

- Oh, come on.
  - Sorry about that.
  - We'll get somebody to look at that.

- Gotta get a bulb around here somewhere.
  - How do we get our people home?

- They are here. We turn 'em around? Straight back? Direct abort?
  - Yes!

- No!
  - I can't guarantee the burn yet.

No, sir, no, sir, no, sir. We get them on a free-return trajectory.

It's the option with the fewest question marks for safety.

I agree with Jerry. We use the moon's gravity to slingshot them around.

No! The LEM will not support three guys for that amount of time.

- It barely holds two.
  - I mean we've got to do a direct abort.

We do an about face. We bring
the guys right home right now.

- Get 'em back soon. Absolutely.
- No. We don't even know if
  the Odyssey's engines even work.

and if there's been serious
damage to this spacecraft--

- They blow up, and they die.
- That is not the argument.

We're talkin' about time,
not whether or not these guys--

- I'm not gonna sugarcoat
  this for you.
- Okay, hold it.

Let's hold it down.
Let's hold it down, people.

The only engine we've got with
enough power for direct abort...

is the S.P.S. on
the service module.

From what Lovell has told us,
it could have been damaged
in an explosion.

So let's consider
that engine dead.

We light that thing up,
it could blow the whole works.

Just too risky. We're not
gonna take that chance.

About the only thing the command
module's good for is reentry, so
that leaves us with the LEM.

Which means
free-return trajectory.

Once we get the guys
around the moon,

we'll fire up the LEM engine,
make a long burn.

pick up some speed and get 'em
home as quick as we can.

Uh, Gene, I'm wonderin'
what the, what the Grumman
guys think about this.
We can't make any guarantees.
We designed the LEM
to land on the moon,
not fire the engine out there
for course correction.

Well, unfortunately we're not
landin' on the moon, are we?

I don't care what anything
was designed to do.
I care about
what it can do.

So let's get to work.
Let's lay it out, okay?

Capcom? Uh, Flight, he says
it'll be ready in time.

After this burn, we've gotta
build some time in the flight
plan for them to get some sleep.

- Run it by the F.A.O.
- I've run it by the F.A.O.
- Do we know how long we're
gonna fire that P.C. burn?
- He specifically wanted a quote
  from a flight director.
- Who wanted a quote?
- The President.
- The President?
- Nixon. He wants odds.

We are not losin' the crew.

Gene, I gotta give him odds.
5 to 1 against? 3 to 1?

- I don't think
  they're that good.
- We are not losin' those men.

Control, how long are they gonna
have to burn the engine
at P.C. plus two?

Look, tell him 3 to 1.

  Expect loss of signal
in less than one minute.

When we pick you back up,
we will have your
P.C. plus two burn data.
Okay, roger that, Houston. We’ll hear from you again at acquisition of signal.

You wanna look?

Oh, look at that.

Wow.

Aquarius, that’s 30 seconds ‘til loss of signal.

Mare Tranquillitatis.

Neil and Buzz’s old neighborhood.

Comin’ up on Mount Marilyn.

Jim, you gotta take a look at this.

I’ve seen it.

Aquarius, this is Houston. Expect loss of signal in approximately ten seconds.

So long, earth. Catch you on the flip side.

When you go into the shadow of the moon, and, and, um,

the moon is between you and the sun,

then you see stars that are more brilliant than anything you’ve ever seen...

on the clearest nights here on earth.

And then, uh, you pass into the lunar sunrise...

over the lunar surface and, uh, it must be an awe-inspiring sight.

I-I-I can’t wait to see it myself.

The problem now is not, uh, so much a question of, uh, an adequate oxygen supply.
but it is the rate of consumption of water, which is vitally needed...

for the cooling operations to maintain the electronic systems.

Look. It's Fra Mauro.

I can see our landing site.

Wow.

Look at the Tsiolkovskii crater.

I can't believe how bright the ejector blanket is.

It's like snow.

It's beautiful.

That's Mare Imbrium to the north.

Thirteen, this is Houston.
We're reading your telemetry.

- It's good to see you again.
- Good to see you, too, Houston.

We are picking you up at a velocity of 7,062 feet per second...

at a distance from the moon of 56 nautical miles.

Stand by for your P.C. plus two burn data.

Gotta tell ya: I had an itch to take this baby down though.

Do some prospectin'.

Damn, we were close.

Gentlemen, what are your intentions?

I'd like to go home.

We got a burn comin' up.

We're gonna need a contingency if we lose comm with Houston.

Freddo, let's, let's get an idea where we
stand on the consumables.

Jack, get into the Odyssey
and bag up all the water you can
before it freezes in there.

- Let's go home.
- Aquarius, we got some, uh,
P.C. plus two burn data
for you fellas.

So you're tellin' me you can
only give our guys 45 hours?

That brings 'em
to about there.

- Gentlemen, that's
not acceptable.
- Well, that's all there is.

- Gene! Gene! We gotta talk
about power here, Gene.
- Whoa, whoa, guys!

Power is everything.
Uh, power is everything.

- What do you mean?
- Without it, they
don't talk to us;

they don't correct their
trajectory; they don't turn
the heat shield around.

I-- We gotta turn
everything off.

Now. They're not gonna
make it to reentry.

- What do you mean "everything"?
- With everything on, the LEM
draws 60 amps.

At that rate, in 16 hours
the batteries are dead-- not 45.

And so's the crew. We gotta
get them down to 12 amps.

- Twelve amps!
- How many? You can't
run a vacuum cleaner
on 12 amps, John.

We gotta turn off-- We have--
We have to turn off the radars,
cabin heater, instrument
displays, the guidance computer, the whole smash.

Whoa. Guidance computer? Wh-What if they need to do another burn? Gene, they won't even know which way they're pointed.

The more time we talk down here, the more juice they waste up there.

- I've been lookin' at the data for the past hour.
- That's the deal?

That's the deal.

Okay, John. The minute we finish the burn, we'll power down the LEM.

All right.

Now in the meantime, we're gonna have a frozen command module up there.

In a couple of days, we're gonna have to power it up usin' nothin' but the reentry batteries.

- Never been tried before.
- Hell, we've never even simulated it before, Gene.

Well, we're gonna have to figure it out.

I want people in our simulators workin' reentry scenarios.

I want you guys to find every engineer who designed every switch, every circuit, every transistor and every light bulb that's up there.

Then I want you to talk to the guy in the assembly line who actually built the thing.

Find out how to squeeze every amp out of both of these goddamn machines.

I want this mark all the way back to earth with time to spare.
We never lost an American in space. We're sure as hell not gonna lose one on my watch.

Failure is not an option.

Ken? Ken?

- What? Huh?
- Good. You're not dead.

I've been tryin' to get in touch with you for 45 minutes.

John. Jesus, John, what are you doin' here?

Gotta get you in the simulators. We got a ship to land.

- What?
- There's been an explosion.

Oxygen tanks are gone. Two fuel cells gone. Command module shut down.

- What about the crew?
- The crew's fine so far. Tryin' to keep 'em alive in the LEM.

We're gonna have to shut that down pretty soon too.

We got a lot of people workin' the numbers on this one, Ken, and nobody's too sure how much power we're gonna have when we hit reentry.

The command module's gonna be frozen up pretty good by then.

We see the sound meter rise over 20 at any point, power-up is no good.

We see it spike, that's sayonara for the guidance computer. Our guys can't reenter, okay?

How much power do we have to play with?

- Barely enough to run this coffee pot for nine hours.
- John.
- Go.
- Yeah, uh, Ken Mattingly just got here.
  - Copy.

- He's here.
- They been losin' heat since the accident.

They're gonna start gettin' a lot of water condensation on the control panels.

Ken. Glad you're here. You know what's goin' on?

Uh, John's brought me up to speed. What do we have left on the batteries?

- We don't really know.
- Then we gotta get started on some shortcuts for power-up.

- Yeah. You know how short?
- Well, it's all in the sequencing, John.

If we can skip whatever we don't absolutely need and turn things on in the right order, maybe--

- I agree.
- You started on a procedure?

Well, the engineers have tried, but, I mean, it's your ship. We gotta get you in there.

Okay, Frank. I need the SIM cold and dark.

Give me the exact same conditions they've got in there now,

and I need, uh, present status of every instrument.

- You got it.
- I need a flashlight.

That's not what they have up there. Don't give me anything they don't have on board.

Let's get this show on the road. Put him in space, fellas.

- Okay, Houston, the quad heater circuit breakers are open.
  - Copy that.
One, we're usin' 
the forward omni when 
the earth's in the window,

and we're switchin' to aft omni 
when we see the moon.

- We copy that, 13.
- Aquarius, we don't want you 
to make any more waste dumps.

The venting may 
push you off course.

- Oh, Christ.
- What's up?

No more waste dumps. We're 
just gonna have to store it.

Jack, we're gonna need 
some more urine bags.

Okay, uh, Houston, that leaves 
us with just the computer,

which I'm shutting down now.

And that's it. We just 
put Sir Isaac Newton 
in the driver's seat.

Is it a.m. or p.m.?

A.M. Very, very a.m.

Haise is running 
a temperature, and none 
of them has slept since--

I can't order these guys 
to go to sleep.

- Could you sleep up there?
- It's gonna get awful cold 
in there for those guys.

Oh, Gene? We have a situation 
brewing with the carbon dioxide.

- We got a CO2 filter problem 
on the lunar module.
- Five filters on the LEM.

Which are meant for two guys 
for a day and a half.
So I told the doc, and he--

They're already up to eight 
on the gauges. Anything over 15
and you get impaired judgment,
blackouts, the beginnings
of brain asphyxia.

- What about the scrubbers
  on the command module?
- They take square cartridges.

And the ones on the LEM
are round.

Tell me this isn't
a government operation.

This just isn't a contingency
we've remotely looked at.

Those CO2 levels are
gonna be getting toxic.

Well, I suggest you gentlemen
invent a way to put a square peg
in a round hole. Rapidly.

Okay, people, listen up.

The people upstairs
have handed us this one,

and we gotta
come through.

We gotta find a way
to make this...

fit into the hole
for this...

usin' nothin' but that.

- Let's get it organized.
- Okay. Okay, let's build
  a filter.

Better get some coffee
goin', too, someone.

The Haise family lives
in El Lago, Texas.

His, uh, wife, Mary,
is from Biloxi, Mississippi.

When Fred Haise was
growing up in Biloxi,

he may have looked ahead
to a fine family, but he
never dreamt of, uh, flying.
I'd never flown, really, 
before I went into the service,

and, uh, I only went into 
the flying business as a means 
to getting a commission.

- Good morning. 
- Henry. Don't you ever sleep?

- I, uh, I have a request 
  from the news people. 
- Uh-huh.

They're out front here, and 
you wanna put a transmitter 
up on the lawn.

- Transmitter? 
- It's kind of a tower 
  for live broadcast.

I thought they didn't care 
about this mission.

They didn't even run 
Jim's show.

It's more dramatic now. 
Suddenly people are--

Well, if landing on the moon 
wasn't dramatic enough for them, 
why should not landing on it be?

Look, I, um, I realize 
how hard this is, Marilyn,

but the whole world 
is caught up in it.

- It's the biggest story since-- 
- No, Henry!

Those people don't put one piece 
of equipment on my lawn.

If they have a problem 
with that, they can take it up 
with my husband.

He'll be home on Friday.

When you are 
tired and lonely

And have no place to go

Come to see me 
baby, and--
And we'll go
donkey tonkin'

Honky tonkin'
honey, baby

We'll go honky tonkin'

Round this town

Hey, Fred.
It's too cold in there.

Yeah.

That's a nice one
of Mary.

- You don't look
too good, Freddo.
- I'll survive.

- There's some aspirin
  in the medicine cabinet.
- I took some.

Jim, I'm all right.

It was an accident,
Mary gettin' pregnant.

Should have seen the look
on my face when she told me.

Well, that has a tendency
to happen.

Yeah.

Wonder if it's
a boy or a girl.

You're gonna find out
soon enough.

Sure.

I never dreamed I'd ever
get to do somethin' like this.

Come up here
on a real mission.

Most of the guys I graduated
high school with never even
left home, and here I am.

Yeah.

Here you are.
It hurts when I urinate.

- Well, you're not gettin' enough water.
- I'm drinkin' my ration, same as you.

I think old Swigert gave me the clap.

He's been pissin' in my relief tube.

Well, that'll be a hot one at the debriefing for the flight surgeon.

That's another first for America's space program.

Listen, um,

I've been goin' over some stuff,

and I'm a little worried about this cold affecting our...

our battery efficiency.

You know, we quit heatin' the glycol to save water and power, so that's not helpin' us any.

- So it could cost us amp hours on the back end?
- It's a possibility.

I've been goin' over the numbers again.

Have they called up with a reentry plan yet? 'Cause we're comin' in too shallow.

We're workin' on somethin', Jack. Just hold on.

I can't remember the ratio to temperature. Uh, we got no references on board.

- Well, let's see if Houston can pull up the mill specs on it and go over 'em.
- L-Listen, listen, listen.

They gave us too much Delta V. They had us burn too long.

At this rate, we're gonna skip
right out of the atmosphere
and we're never gonna get back.

What are you talkin' about?
How'd you figure that?

- I can add.
- Jack, they've got half
  the Ph.D.s on the planet...

- workin' on this thing.
- Houston says we're
  right on the money.

And what if they had made
a mistake, all right? And
there was no way to reverse it?

Do you think they would tell us?
There's no reason
for them to tell us.

What do you mean they're not
gonna tell us? That's bullshit!

All right, there's a thousand
things that have to happen, in
order. We are on number eight.

You're talkin' about
number 692.

And in the meantime, I'm tryin'
to tell you we're comin' in
too fast. I think they know it,

and I think that's why we don't
have a goddamn reentry plan.

That's, that's duly noted.
Thank you, Jack.

-Ow! Goddamn this piece of shit!
-Hey! This piece of shit's gonna
get you home.

- All right.
- That's 'cause that's the only
  thing we got left, Jack!

- What are you sayin', Fred?
- I think you know
  what I'm sayin'.

Now wait a minute. All I did
was stir those tanks.

- What was that gauge readin'
  before you hit the switch?
- Hey, don't tell me how to fly
  the damn C.M., all right?
- You don't even know, do you?
- They brought me in here
to do a job.

They asked me to stir the damn
tanks, and I stirred the tanks!

- Jack, stop kickin' yourself
  in the ass.
- This is not my fault!

No one is sayin' it is.

If I'm in the left-hand seat
when the call comes up,
I stir the tanks.

- Yeah, well, tell him that.
- I just asked you what
  the gauge was readin'.

- All right, we're not gonna--
- And you don't know!
- All right, look. We're not
doin' this, gentlemen.

We are not gonna do this.
We're not gonna go bouncing off
the walls for ten minutes...

'cause we're just gonna
end up right back here
with the same problems--

tryin' to figure out
how to stay alive!

- Aquarius, this is Houston.
- Are we on VOX?

- No, we're not on VOX.
- Yeah, Houston, this is
  Aquarius. Go ahead.

Uh, yeah, Jim, uh, could you
check your CO2 gauge for us?

Uh, yeah, Houston, we were
just lookin' at that.
Our CO2 measurement...

has jumped four notches
in the last hour.

That can't be right. I went over
those numbers three times.

Jim, that sounds about right.
We were expecting that.
Well, that's very comforting to know, Houston. Uh, what do we do about it?

Jim, we're working on a procedure down here for you.

- Do you copy?
- Oh, Christ.
- All right, Houston.

- We're standing by for those procedures.
- Christ, I know why my numbers are wrong.

I only figured it for two people.

Maybe I should just hold my breath.

The deadly CO2 gas is literally poisoning the astronauts with every breath in and out.

- Heads up. Heads up.
- NASA spokespeople will not comment--

Oh. Go, go, go, go, go, go.

Heads up, people. Look out now.

- What's this?
- That's what they gotta make.

- Well, I hope you got the procedures for me.
- Right here.

That's it?

All right, Aquarius, this is Houston.

Uh, do you have a flight plan up there?

Affirmative, Andy. Uh, Jack's got one right here.

Okay, we have a, uh, an unusual procedure for you here.

We need you to rip the cover off.

They want you to rip the cover
off the flight plan.

- With pleasure.
- All right now, the other materials you're gonna need here...

are, uh, a lithium hydroxide canister--

- Two, two.
- Two lithium hydroxide canisters. I'm sorry.

- A roll of gray tape.
- Duct tape.

The duct tape. You need an L.C.G. bag.

Two L.C.G. bags. Uh, the red suit hoses.

And you've got the flight plan cover.

What about their level of carbon dioxide?

It's, uh, climbing.

You're saying that they're almost out of breathable air.

No, wait a second.
Wait a second. That's, that's not what he said.

He said we're workin' on it.

You wanna cut the duct tape three feet long.

- Uh, that's--
- Tell him to use his arm.
- Just use your arm.

- It's a good arm length.
- O-Okay, Houston, I see what you're gettin' at. Hold on.

Okay, Jack, tear that piece of tape down the middle lengthwise.

- All right?
- Hold on, Houston.

While the astronauts appear to have enough oxygen to keep them alive,
one thing they have too much of is carbon dioxide.

With each breath, the three men expel more of the poisonous gas into the lunar module cockpit,

and the scrubbers intended to keep the atmosphere breathable are quickly becoming saturated.

Shit, I tore it.

Shit!

Uh, Houston, uh, what do we do if we, uh, rip the bag? Can we tape it?

- They just tore the bag.
- Oh, no.

Uh, stand by. What should I tell 'em to do?

- Well, they, they should have one more bag left.
- But they've still got, uh, a long way to come, and they are now working on their backup facilities,

their emergency facilities, and the problem is, if anything more goes wrong, they're in real trouble.

And, as most of you are aware, there is no rescue possible in space flight.

Any rescue system the space agency has long since calculated--

Any since--
Uh, any rescue system the space agency calculated--

- One sock.
- Once you have the sock in place,

- we're gonna want you to, uh, Work it in.

bungee the entire filter assembly to the bulkhead,
right above the LEM canister.

We're getting close to 15.

So how does this flight compare to other emergency situations you've faced?

Well, I'd have to say that this is the most serious situation...

we've ever encountered in a manned space flight.

- Houston, filters in place.
- Roger, 13.
- Cabin gas return to egress.

Suit circuit relief to close.

- CO2 canister select to secondary.
- All right.

Here goes.

I can hear air moving.

Just breathe normal, fellas.

Aquarius, uh, please advise on CO2 status.

Uh, yeah, Houston. We're takin' a look at those numbers right now.

Uh, we're still holding close to 15, Houston.

Roger that. Standing by.

Houston, the CO2 level has dropped to nine.

And it is still falling.

- Yes!
- Good job, you guys.

That is good to hear, Aquarius. And you, sir, are a steely-eyed missile man.

Okay, spacecraft control to computer.

Damn!
Damn.

We overloaded.

Used way too much power there. There must be a sneak circuit...

someplace between
step seven and ten.

All right, which one
has the leak?

Don't know that yet, John.
We jus-- The sequence was wrong.

We just have to go back
and try 'em one at a time.

You need a break, Ken?

If they don't get one,
I don't get one.

Well, if it won't work,
get me another one.

- My son's supposed to be on.
- I know, Mrs. Lovell.

- Hi, Blanche.
- They can't fix a damn thing in this place.

Blanche, it's Marilyn.

Hi, Grandma.

I was gonna see Jimmy.

I know, I know. Um--

We came to tell you something.

There's been an accident.
Jimmy's okay. He's all right.

Uh, but he's not gonna get to walk on the moon.

Well, they said he was.

I know. I know. Um--

That was before. Now there's been an explosion, and--

They're all okay.
They're all right.
But now they're just going to...

try to figure out a way to get them home.

And--

And it's a little bit dangerous.

Oh, sweetie.

Are you scared?

Well, don't you worry, honey.

If they could get a washing machine to fly, my Jimmy could land it.

Uh, Jack, you'll be happy to hear that we contacted President Nixon,

and he's gonna grant you an extension on your income taxes...

since you are most decidedly out of the country.

Roger that, Houston. That's wonderful news.

Tell them they have to sleep. Haise is runnin' a fever of 104.

Uh, 13, listen, we've had another request from the flight surgeon...

that, uh, you fellas get some more sleep.

He doesn't like his readings down here.

Let's see how he feels about this.

I am sick and tired of the entire Western world...

knowing how my kidneys are functioning.
Flight, I just lost Lovell.

Uh, 13, this is Houston.

Uh, Jim, we've just had a dropout on your biomed sensors.

I'm not wearing my biomed sensors, Houston.

Okay, Jim, copy that.

Flight, now I'm losin' all three of 'em!

It's just a little medical mutiny, doc. I'm sure the guys are still with us.

Let's cut 'em some slack, okay?

Gene, it-it's not the velocity. It's the angle.

I mean, maybe they're, they're still venting something.

and that's throwing out the trajectory, but we are definitely shallowing again.

- We are up to a 5.9.
- Damn it.

At this rate, they nick the Earth's atmosphere and bounce off into space.

We'll never get them back. We need another burn to get 'em back in the, uh--

- Definitely need another burn.
- Another burn.

- Fire the engines and get 'em on course.
- Copy that.

Aquarius, this is Houston.

Houston, Aquarius.

Uh, Jim, we've got another course correction for ya.

What's up?

Somethin' about another course correction.
Uh, we copy, uh, Houston.

Be advised, it's gonna take Freddo and I awhile to power up the computer...

for the, uh, alignment platform.

- We have to fire the engine.
  - Uh, negative on that, Jim.

Can't, uh, spare power for the computer.

- We gotta do this blind?
  - Uh, Houston,

without the computer, what do we use for orientation?

Sid, come on. We gotta be able to give these guys somethin' up there.

Without the power, we can't give them a reading.

We're not talkin' about power. We're talkin' about references.

No, no. There's no references. We have a bunch of debris up there.

Houston, what's the story with this burn?

We're trying to hash something out down here, Aquarius. Stand by.

Well, now look, Houston, all we need to hold attitude is one fixed point in space.

- Is that not correct?
  - Yeah. Roger that, Jim.

Well, Houston, we've got one.

If we can keep the Earth in the window, flying manually, the coace crosshairs right on its terminator.

All I have to know is how long do we need to burn the engine?
The shorter the better.

Roger that, Jim.
Can they fly it manually?

And still shut it down on time
without the computer?

I guess that's the best we
can do, Glynn. We're outta time.

In order to enter the atmosphere
safely, the crew must aim
for a corridor...

just two-and-a-half
degrees wide.

If they're too steep,
you'll incinerate in
the steadily thickening air.

If they're too shallow, they'll
ricochet off the atmosphere like
a rock skipping off a pond.

The reentry corridor is,
in fact, so narrow...

that if this basketball were
the Earth and this softball
were the moon...

and the two were
placed 14 feet apart,

the crew would have to hit
a target no thicker than
this piece of paper.

Okay, people, on your toes.
We're doin' this one blind.

Gene, I want you to understand
we've never tried this before.

Burn and cold soap.
Burn, cold soap.
Burn, manual control.

Look, it will ignite,
will it not?

I just want you to know
the engine's never
been tried like this.

That's all I'm tryin' to
tell ya.

Look, I know what you're tryin'
to do. I guarantee you I won’t hold you personally responsible.

If it lights, it lights. Let Lovell do the rest.

- Okay.
- They’re gonna burn the engines and steer it manually, attempting to keep the Earth in the window.

Okay, this is gonna take all three of us.

Freddo.

You handle the pitch. Put on the translation controllers, all backwards, so if the Earth starts driftin’ down, you need to thrust aft, not forward.

I’ll do the same—in line with everything else.

We’re gonna burn at ten percent thrust for 39 seconds. Jack, you time us.

- Got it.
- Give us a count of the last ten seconds up to 39.

Let’s not miss this.

You up to this, Freddo?

I’m with ya.

Standing by for corridor control burn.

Okay, Jim, you can fire when ready.

You are go for the manual burn.

Connect the plus-button at ten seconds. Mark.

- Come on, baby. One more burn.
- Nine, eight, seven, six, five, four,
- All engines go.
- three, two, one.

Ignition.
- She's burnin'.
- Oh, yeah.
- Master arm off.
- Okay, here we go.
- Human rate-weighter gone.

RCS is go.
Ten percent thrust.
- Turn around, Freddo.
- I'm tryin', but it's draggin'.

- Ten seconds.
- You're droppin' down, Freddo.
- Driftin'. We're driftin'.
- No, you hold what you got.
  I'll roll it.

God, I can't get it stable.
Shit, she's dancin'
all over the place.
- Come near the right
  a little bit. A bit.
- Fifteen seconds.

She's driftin'. I'm
losin' attitude. Okay.
- Hold it right there. That's
  it. Back! No, Freddo! Back!
- Shit, I'm losin' it!

- Twenty seconds. Forward,
  Fred. Come on. Forward.
- Bring the Earth up.

Shit. Shit, I lost it.
- Where is it? Where is it?
- 7:00.

Bring it down, Freddo.
Just nose it down.
- Okay. Okay, I got it.
- Little farther. Little more.
  Make it tight.

Damn it. Damn it.
That's mine.

That's me. Look around.
- Little more. Come on, baby.
- Come on. That's it. Hold it.
  Pull high.

Damn it. Back. That's it.
Hold it. Steady. Steady.

- Nine.
- Shutdown.

- Houston, we have shutdown.
- That's close enough, Jim.
  Good work.

I knew it! I knew it.
How 'bout that LEM, huh?

How 'bout it? Eh?

- I guess you can
  keep your job.
- You betcha.

13, stand by. We're evaluating
our power usage on that burn.

Well, let's hope we don't have
to do that again.

Gentlemen, we've given our guys
enough to survive 'til reentry.

Well done.

Now we gotta get 'em in. Tell me
about the power up procedures.

Here's the order
of what I wanna do.

I wanna power up guidance,
ECS, communications.

Warm up the, uh, pyranose
for the parachutes and the
command module thrusters.

The thrusters are gonna put you
over budget on amps, Ken.

Well, they've been sitting at
200 below for four days, John.
They gotta be heated.

Fine. Then trade off
the parachutes. Something.

Well, if the chutes don't
open, what's the point?

Ken, you're telling me what you
need. I'm telling you what we have to work with at this point.

- I'm not making this stuff up.
- They're gonna need all these systems, John.

We do not have the power, Ken! We just don't have it.

Okay, I'm gonna go back and reorganize the sequencing again and find more power.

Let's start from scratch.
Clear the board.

I don't know where the hell we're gonna find it.

Apollo 13 Commander Jim Lovell has more time in space--

almost 24 days already--than any other man.

And I asked him recently if he ever was scared.

Oh, well, I've had an engine flame out a few times in an aircraft...

and was kind of curious as to whether it was goin' to light up again--things of that nature--

but, uh, th-they seem to work out.

Is there a specific instance in an airplane emergency when you can recall fear?

Uh, well, I tell ya, I remember this one time--

I'm, uh, I'm in a Banshee at night in combat conditions,

so there's no running lights on the carrier.

Uh, it was the Shangri-La, and we were in the Sea of Japan, and my radar had jammed, and my homing signal was gone... because somebody
in Japan was actually using the same frequency.

And so it was-- it was leading me away from where I was supposed to be.

And I'm lookin' down at a big, black ocean, so, uh,

I flip on my map light, and then suddenly:

Zap. Everything shorts out right there in my cockpit. All my instruments are gone.

My lights are gone. And I can't even tell now what my altitude is.

Uh, uh, I know I'm running out of fuel, so I'm thinking about, uh, about ditching in the ocean.

And I, I look down there, and then, in, in the darkness, there's this, uh, there's this green trail.

It's like a long carpet that's just laid out right beneath me. And it was the algae, right?

It was that phosphorescent stuff that gets churned up in the wake of a big ship.

And it was, it was, it was just leading me home.

You know? If my cockpit lights hadn't shorted out,

there's no way I'd have ever been able to see that.

So, uh, you, uh, you never know...

what... what events are going to transpire to get you home.

Okay. Spacecraft Commander Jim Lovell. No stranger to emergency is he.

- How's it goin', Fred?
- I'm okay.
What the hell was that?

Let's hope it was just a burst disk.

- Uh, Houston, can you confirm a burst helium disk?
  - We confirm that, Jim.

Uh, Houston, is that gonna affect our entry angle at all?

Uh, negative. Your entry angle is holding at 6.24, Aquarius.

Houston, uh, we, we sure could use the reentry procedure up here.

When can we expect that?

Uh, that's comin' real soon, Aquarius.

Uh, Houston, uh, we, we, we just can't throw this together at the last minute.

So here's what you're gonna do.

You're gonna get the procedure up to us, whatever it is,

and we're gonna go over it step by step so there's no foul-ups.

I don't have to tell ya we're all a little tired up here.

The world's gettin' awfully big in the window.

- Jim, this is Deke.
  - It's Deke.

They don't know how to do it.

Maybe Jack's right.

- Hello there, Deke.
  - What's the story?
  - Jim, we're gonna get that power-up procedure to you.

We're gonna get it as soon as we possibly can. Ken Mattingly's in the simulator right now.
Ken’s working on it.

Look, I know this sequence works, John.

The sequence looks good. We’re just over budget on the amperage.

- By how much?
  - Three or four amps.

Goddamn it, John.
Is it three or four?

  - Four.
  - Four.

Four more amps.

We know they have some power left in the LEM batteries, right?

  Yeah.

We have an umbilical that provides power from the command module to the LEM.

  - Right, it’s backup for the LEM power supply.
  - I’m listening.

So, reverse it. Reverse the flow and see if we can draw…

these four amps from the LEM batteries before we cut it loose.

Why can’t we do that?

  - We don’t have a procedure for that, do we?
  - You’re gonna lose a lot in the transfer, Ken.

Yeah, yeah, but all we’re talkin’ about here is four amps.

- Well, what’s the latest we got?
  - I want whatever you guys got on these power-up procedures.

- Gene, they’re already--
  - No, I don’t want the whole damn Bible.
Just gimme a couple chapters. We gotta get somethin' up to these guys.

- They're workin' on it now.
- I'll call over to the simulator and get an estimate.

Goddamn it! I don't want another estimate. I want the procedures. Now!

IMU is up.

- How am I reading?
- Fine so far.

- Say again?
- You're under the limit. Keep goin'.

Okay. Floodlights to fixed.

Okay, bring up the guidance.

Here we go.

CMC attitude IMU.

CMC to auto.

Turn on the computer.

Ken?

- Go ahead.
- Is your computer on now?

Up and running.

How do we look?

John?

I think we got it, buddy.

- Arthur, uh, my notes are clear on that last sequence, right?
- Yeah.

- We're clear from building five. Excuse me, gentlemen. ...a little blurry there.

I do. I-I'll let you know. Just stand by.

Here's Ken. Here's John.

It's good to see ya, Ken.
- This is the sequence.
- Has he tried it on
  the hardware yet?

We didn’t have time.

Aquarius, Houston.
Do you read?

Yeah, we read you, Ken.

Are the flowers blooming
in Houston?

Uh, that’s a negative, Jim.
I don’t have the measles.

Jim, is, uh, Jack
in there with you?

Uh, yeah. Stand by one.
We gotta get him on com.

- Can we get this on the table--
- Oh, damn it.

- Thanks, Jackie.
- I think it would really
  help if you could, uh,
  just distract her when the
  heavy predictions come in.

- Yeah. Yeah,
  we’ll give it a shot.
- Thanks.

Um, Blanche. Blanche,
these nice, young men...

are gonna watch
the television with you.

- This is Neil Armstrong,
  and this is Buzz Aldrin.
- Nice to meet you.

- Hi.
- Are you boys in the
  space program too?

Okay, uh, Jack,
uh, give me a read-back
on that last procedure.

Uh, stand by, Ken.

Ken, I’m, uh--

Well, I’m havin’ trouble
readin’ my own writing.
I guess I was a little more tired than I thought.

Uh, don’t worry, Jack.
I’ll talk you through it.

Okay, uh, find the main bus breakers on panel 11.

- Yeah, main bus breakers. Got it.
- Close main bus B.

Uh, Ken, there’s an awful lot of condensation on these panels.

What’s the word on these things shorting out?

Uh, we’ll just, uh, take that one at a time, Jack.

It’s like tryin’ to drive a toaster through a car wash.

- Main bus B is closed.
- Okay, 13, we’re, uh, comin’ up on entry interface.

Flack, we’re still shellin’ up a bit in the reentry corridor.

It’s almost like they’re underweight.

- Now how could they be underweight?
- We didn’t land on the moon.

- Rocks?
- That’s affirmed.

Uh, one more thing, Jim.
While Jack’s workin’ on the power-up...

we’d like you and Freddo to transfer some ballast over the command module.

Uh, say again, Houston.
Ballast?

Uh, that’s affirm. Uh, we gotta get the weight right.

We were expecting you to be toting a couple hundred pounds of moon rocks.

- Right, Houston.
-Now, Jack.

- Yeah, go ahead, Ken.
-Okay, now, uh, panel five.

Circuit breaker-- caution
and warning-- main B, closed.

Main B, closed.

The master alarm, off.

Okay, Jack, uh, on
panel seven, B mag number
two, power to warm-up.

B mag number two,
power to warm-up. Done.

Sequential logic,
one and two on.

Sequential logic,
two on.

-CMCS pressure, on.
- CMCS pressurization.

As her husband
prepares to jettison
his lunar module lifeboat,

Marilyn Lovell waits with
her children, her neighbors,

and, we are told, Apollo 11
astronauts Neil Armstrong
and Buzz Aldrin.

Only the Lovells' eldest son,
Jay, is absent, as he holds
vigil with his classmates...

at the St. John's Military
Academy in Wisconsin.

ABC news science editor,
Jules Bergman.

With a crippled command
module and surviving by
using the LEM's systems,

there can be
no easy maneuver.

And their LEM lifeboat is doing
things and working longer than
it was ever intended to.

It's a race against time
until splashdown.

Okay, Jack, we’re ready to see if the computer will accept uplink of the reentry data now.

Okay, the IMU is up. We got our eight balls back.

-Copy that.
- Okay, Ken, uh,

uplink telemetry, command module to accept, right?

Uh, that’s affirm.
Go ahead and try it.

Uplink completed.

- Yeah. That’s more like it.
- Back in business.
- Okay, let’s go.

- Take a look at your amps.
  How’re we doin’?
- Let’s go. All right.

We got her back up, Ken. Boy, I wish you were here to see it.

I’ll bet you do.

Way to go, Jack.

- Flight, this is Retro.
- Go, retro.

Flight, we are looking
at a typhoon warning on the edge of the prime recovery zone.

- Say again, Retro.
-Flight, we are looking
  at a typhoon warning...

on the edge of the prime recovery area.

Now this is just a warning, Flight. It could miss them.

Only if their luck changes.

Jim, we’re ready for SM jettison.

All right, Jack. On three.
One, two-- Upward thrust.
- We're loose.
- Reverse thrust.

We have service module jettison.

Okay, Houston, uh, service module is free.

We're gonna take a look at what we have here.

Copy that.

There it is. I see it.

Oh.

Houston, we're getting our first look at the service module now.

One whole side of the spacecraft is missing.

Right by the high-gate antenna the whole panel is blown out...

right up-- right up to our heat shield.

- Uh, copy that, Aquarius.
- It looks like it got the engine belt too. Can you see that?

Oh, man, that's incredible.

- The heat shield.
- The heat will build up...

to as much as three or four thousand degrees Fahrenheit.

- On a lunar reentry flight, the heat approaches 4,000 degrees.
- So, uh, Blanche.

Blanche? Did-- Did Jim, uh, make Eagle Scout or not?

- Yes, he did.
- He did?
- If the heat shield...

is even slightly cracked, the extreme cold could've split it wide open.
Worst of all, if the pyrotechnics that control the parachutes have been damaged,
the chutes may not open at all, causing the spacecraft...
to hit the water not at a gentle 20 miles per hour but at a suicidal 300.

Perhaps never in human history has the entire world been united by such a global drama.

In New York City, thousands of people have gathered...
to watch updates of the mission in Times Square.

Many countries offered help, and the State Department said...
it would ask for it if it were needed.

The House and Senate passed resolutions calling on the American people...
to pray tonight for the astronauts.

In Rome, Pope Paul led 50,000 people in prayers...
for the safe return of the astronauts.

In Jerusalem, prayers at the Wailing Wall.

It's about time to bail outta this ship, Freddo.

Freddo.

You okay?

I'm- I'm freezing.

Can you hold out just a little longer?
- As long as I have to.
- Oh, damn.

Come on. Just a little while longer, Freddo.
Little while longer. We're gonna hit that water...

in the South Pacific, open up that hatch.

- It's 80 degrees out there.
- Eighty degrees.

You are a mess.

Thank you.

Odyssey, Houston. Uh, how we doin', guys? We're closing in on lunar module jettison.

As you know, that is time critical.

Uh, we should be makin' our move into the command module.

Let's get that hatch buttoned up and, uh,

when you get a chance, let us know how you're doin'.

Roger that.

Here, lemme give you a hand there, Freddo.

We're comin' up on LEM jettison.

Everyone strapped in, Ken? We're gettin' real close.

Uh, copy that, Flight.
Uh, 13, Houston. Uh, we're coming up on LEM jettison.

Stand by.

Have you got everybody in the Odyssey?

Yeah, Ken. I'm gonna check those pyro batteries one more time.

Okay, pyro batts look good.
I don't think we're gonna have to tie the other batteries.

Sorry, Jack,
it's an old habit.

I'm kinda used to the pilot's seat. She's yours to fly.
Okay, Odyssey, I wanna double check some reentry procedures...

right after we jettison the LEM, which is coming up in 30 seconds.

- What is that?
- Oh.

I was gettin' a little punchy, and I didn't wanna cut the LEM loose with you guys still in it.

That's good thinking.

Stand by, Houston.

We have lunar module jettison.

She sure was a good ship.

Farewell, Aquarius, and we thank you.

Mary.

It's almost time, honey.

Flight 966-406.

Lemme put it this way: trajectory may be off,

their thrusters may be frozen, their guidance system may be malfunctioning,

their heat shield could be cracked and their parachutes might be three blocks of ice.

- Clearly, we have some obstacles to overcome.
- Yeah, okay.

but now I'm asking you, when will we know?

Well, blackout lasts for three minutes. If they're not back in four, we'll know.

Velocity now reading 34,802 feet per second.

Range to go: 2,625 nautical miles.
Okay, Ken, we are aligned for reentry.

Jim, we're gonna need that computer reentry program. Fred, how are the batteries lookin'? 

Okay. Batt A looks good.

- Reentry interface in one minute and 30 seconds.
- Batt B, no volts;
  the amps are okay.

Batt C--

Shit, no volts; only two amps.

It may die before the main chutes open.

Roger. Let's tie all the batteries onto main A and main B.

Flight, they're still shallowing a bit up there. Do you want to tell 'em?

- Is there anything we can do about it?
- Not now, Flight.

- Then they don't need to know, do they?
- Copy that.

Retro says the typhoon is still a presence in the splashdown area?

- Yeah.
- Well, we got the, uh, parachute situation, the heat shield, the angle of the trajectory and the typhoon.

- There's just so many variables, I'm a little--
- I know what the problems are, Henry.

This could be the worst disaster NASA's ever experienced.

With all due respect, sir. I believe this is going to
be our finest hour.

Expect entry interface in 45 seconds.

And on my mark your velocity...

will be 35,245 feet per second.

Mark, 35 seconds to entry interface.

Gentlemen,

it's been a privilege flying with you.

Flight, we have loss of radio contact.

- Roger that.
- Expect to regain signal in three minutes.

It all depends on the heat shield.

Back to the Iwo Jima and our live cameras there.

The Navy recovery and rescue helicopters already airborne, circling, waiting for first--

Coming down to three minutes until time of drogue deployment.

Standing by for any reports of acquisition.

One minute and 30 seconds to end of blackout.

No reentering ship has ever taken longer than three minutes to emerge from blackout.

This is the critical moment. Will the heat shield hold?

Will the command module survive the intense heat of reentry?

If it doesn't, there'll only be silence.

- Mommy, you're squishing me.
- Oops, sorry, sweetie.

It's okay.

Okay, Flight, that's three minutes. We are standing by for acquisition.

Copy that.

Odyssey, Houston.
Do you read me?

Odyssey, this is Houston.
Do you read?

Expected time of reacquisition, the time when the astronauts...

were expected to come out of blackout,

has come and gone.

But all any of us can do now is just listen and hope.

We're about to learn whether or not that heat shield, which was damaged, as you remember, by the explosion three days ago,

has withstood the inferno of reentry.

Odyssey, this is Houston.
Do you read me?

Odyssey, Houston.
Do you read me?

Three minutes, 30 seconds. Standing by.

Odyssey, Houston.
Do you read?

Odyssey, this is Houston.
Do you read me?

That's four minutes, and standing by.

Odyssey, uh, Houston.
Do you read?

Hello, Houston. This is Odyssey. It's good to see ya again.
Odyssey, Houston. Welcome home. We're glad to see ya.

Good job, Ken. Good job.

Houston, uh, we're at stable one. The ship is secure.

This is Apollo 13 signing off.

Good job.

Our mission was called "a successful failure," in that we returned safely but never made it to the moon.

In the following months it was determined that a damaged coil... built inside the oxygen tank sparked during our cryo stir... and caused the explosion that crippled the Odyssey.

It was a minor defect that occurred two years... before I was even named the flight's commander.

Fred Haise was going back to the moon on Apollo 18, but his mission was cancelled because of budget cuts. He never flew in space again.

Nor did Jack Swigert, who left the astronaut core... and was elected to Congress from the state of Colorado. But he died of cancer before he was able to take office.

Ken Mattingly orbited the moon as command module pilot of Apollo 16... and flew the space shuttle, having never gotten the measles.

Gene Kranz retired as
Director of Flight Operations
just not long ago.

And many other members of
Mission Control have gone
on to other things.

but some are still there.

And as for me, the
seven extraordinary
days of Apollo 13...

were my last
in space.

I watched other men walk
on the moon and return safely...

all from the confines
of Mission Control and
our house in Houston.

I sometimes catch myself
looking up at the moon...

remembering the changes of
fortune in our long voyage,

thinking of the thousands
of people who worked to
bring the three of us home.

I look up at
the moon and wonder,

when will we be
going back?

And who
will that be?