Apollo 13

(Drama/Adventure) (1995) © 2000 by Raymond Weschler

Major Characters

Jim Lovell......Tom Hanks The greatly respected commander of Apollo 13. Fred Haise......Bill Paxton The second astronaut that was planning to walk on the moon with Jim. Jack Swigert......Kevin Bacon The pilot of the command module that was going to circle the moon while Jim and Fred walked on the lunar surface. Ken Mattingly......Gary Sinise The original pilot of the command module, who was replaced by Jack at the last moment, because of health concerns by NASA doctors. Gene Kranz.Ed Harris The head of Mission Control in Houston, Texas, which is responsible for guiding all of the missions into outer space. Marilyn Lovell......Kathleen Quinlan Jim's wife, and the mother of his three kids.

Plot Summary

This film is the true story of Apollo 13, the third American space mission to the moon. It took place in the Spring of 1970, just one year after Neil Armstrong became the first man to ever walk on the lunar surface, in July 1969. A couple days after the rocket took off, an explosion dramatically changed the nature of the mission, and what was to become the third trip to the moon was suddenly changed into a desperate attempt to get the astronauts back home to earth.

It is easy to forget just how difficult this was, for much of the spaceship had been heavily damaged by the explosion. Over the course of four extremely tense days, specialists in Houston and the astronauts themselves faced a variety of deadly challenges, from the spaceship's shortage of electrical power and breathable air to the risk of literally getting lost in space. Ultimately, this is one of the truly amazing tales of human skill and courage.

Some basic NASA-related vocabulary frequently used in this film:

<u>NASA</u>: The National Aeronautics and Space Administration, which is the government agency responsible for all space exploration.

<u>Mission Control</u>: The highly computerized control center in Houston, Texas, that guides all space missions. Often referred to as simply "Houston."

<u>The Command Module</u>: That part of the spaceship which was supposed to stay in orbit around the moon. For Apollo 13, it was named "<u>Odyssey</u>" (which is a word that means a great adventure or voyage).

<u>The LEM</u>: This is the <u>Lunar Excursion Module</u>, which was supposed to take two of the three astronauts down to the moon's surface after separating from the main rocket ("Lunar" is an adjective for anything related to the moon). For Apollo 13, it was called "<u>Aquarius</u>," which is a constellation of stars.

Roger: A NASA/military way of saying OK.

Standby: A NASA/military way of saying "please wait a moment."

Some Words and Expressions that You May not Know

Jim and his crew learn they will be going to the moon sooner than they had thought.

The most <u>hazardous</u> and dangerous and greatest adventure on which we have ever embarked.

"Hazardous" is another way of saying dangerous.

"To embark" on a trip is to leave, usually on a ship.

Tonight, a <u>mere</u> 18 months after the tragedy of Apollo 1, the entire world watched **in awe**...

"Mere" is an excellent little word meaning only or just. To be "in awe" of something is to be absolutely amazed or fascinated

by it. It is often a feeling of respect mixed with fear and wonder.

The important thing when you're <u>penetrating</u> the lunar module is your attitude and relative speed.

"To penetrate" an object is to enter into it, but be aware that this verb often has a very sexual connotation! The "lunar module" is the tiny part of a spaceship designed to actually land people on the moon.

This thing sticks out in front. It's called a probe.

A "probe" is a thin metal tool that is used to explore the inside of a hole, such as a wound in the human body.

Everything is <u>clicking</u>...it's like no other feeling in the world.

"To click" is to make a short and gentle sound, such as when using a computer mouse. When "everything is clicking," things are going well.

This guy did 10 laps.

A lap is the distance traveled from one end of a swimming pool or race track to the other end.

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

To "cut a program" such as space exploration is to stop giving it money. Note that "going to"----> "gonna" in rapid speech.

He asked who we <u>bribed</u> to get on Jim Lovell's crew.

"To bribe" a person is to offer them money or gifts in exchange for favorable treatment. It is often unethical and even illegal.

I appreciate you coming to this <u>dress rehearsal</u> party for my Apollo 12 landing. A "dress rehearsal" is a practice session for actors in a play, or in this case, for astronauts needing to learn everything possible about their mission. "To rehearse" is to practice.

We should take a moment to recognize the <u>exemplary</u>, damn near heroic display by Neil Armstrong's <u>backup</u> for this historic moonwalk.

"Exemplary" means outstanding or truly excellent. A "backup" is a person who will do the job of another if the first person can't do what they were supposed to do.

And of course his crew.

The "crew" of a ship are all the people on board who help to run it.

Do you think it's too late for him to <u>abort</u>?

"To abort" a mission is to stop or kill it, often right in the middle.

No, he needs somebody to <u>wave him off</u>! Pull up!

"To wave off" a person is to try and signal them to stop doing what they are in the process of trying to do.

His <u>quote</u> was "that's one small step for man, one giant leap for mankind."

A "quote" is the exact words that person has used in the past. In this case, these are the words of Neil Armstrong as he set foot on the moon.

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

"I bet" is a very common way of saying "I'm sure that..."

A "wink" of sleep is a short time ("To wink" is to quickly open and shut your eyes, often in order to attract or flirt with someone).

On Apollo 8, we were so close....just 60 <u>nautical miles</u> down.

A unit of measure used at sea, which equals about 1,800 meters.

That's the <u>sea of tranquility</u>, and your mountain is on the <u>edge</u> of that.

The "sea of tranquility" is a well known part of the moon's surface (Tranquility is another word for peace or calm). The "edge" of a surface is the outside border, or line.

You gotta look harder.

"You have got to look more seriously."

Note that "have got to"---> 'gotta' in rapid speech.

"Give me a lever long enough, and I'll move the world."

A "lever" is a bar or tool for moving something heavy or stiff.

That's what we're doing here. This is divine inspiration.

An expression for something that has been motivated by or inspired by God ("Divine intervention" is an act of God on earth).

This is the actual launch <u>vehicle</u> that will be taking Alan Shepherd and his crew on the first <u>leg</u> of the Apollo 13 mission.

A "vehicle" is a car, ship or other type of transportation that can carry people and products. Trips are divided into "legs," or individual parts.

I'm slated to be the commander of Apollo 14.

To be "slated" to do something is to be chosen and expected to do it. A "commander" is the leader or captain of a crew or group of people.

People are asking why we're continuing to <u>fund</u> this program now that we've beaten the Russians to the moon.

"To fund" a project is to pay for it, often with taxpayer money. This is a reference to the fact that both the Americans and Russians wanted to be the first country to land on the moon, until the US did first in 1969.

It's a <u>highly technical</u> <u>process</u> of <u>cranking down</u> the window and looking for a gas station.

Anything that is "highly technical" is complicated. A "process" is a key word for a series of actions that take place over time in order to accomplish something. "To crank down" a window is to lower it.

He hands out the astronauts' <u>flight assignments</u>, so we <u>kick back</u> part of our salaries to Deke.

"Flight assignments" are the particular jobs or flights that each astronaut is told he will do. To "kick back" money to a person is to pay them for a favor, but this is often done in a way that is considered illegal or unethical (such as a bribe, which is payment for a favor).

Jim, can I have a minute? Something has <u>come up</u>. A common way of saying to happen or occur.

Alan Shaper's ear infection has <u>flared up</u>; We've all been <u>bumped up</u> to the <u>prime crew</u> of Apollo 13.

If an infection "flares up," it becomes bigger and more troublesome, at least for a short period of time. To "bump up" a person in a line is to move them closer to the front. The "prime crew" are the people scheduled to fly (while the backup crew only flies if those in the prime crew are sick or unavailable).

I gotta get over there; We're going to have to get <u>up to speed</u> on this. To get "up to speed" on a situation is to study it well so that you can understand the problems and possible solutions.

All systems are on the line...the <u>docking target</u> is clear.

"To dock" a ship is to land it next to or inside another ship, and thus in this case, the docking target is a part of the rocket.

Let's shut down some thrusters.

A "thruster" is a part of a rocket engine that pushes the ship forward.

Houston, we are <u>drifting</u> down and away.

"To drift" means to be slowly pushed by wind or other outside forces.

Wanna back off and take another run?

"Do you want to start over and try again?"
Note that "want to"----> "wanna" in rapid speech.

Let me try and get it stable here.

"Stable" is an important word meaning not easily moved or changed.

Go ahead and $\underline{recycle}$ the \underline{valves} .

"To recycle" a product is to use the material it is made of, such as wood or metal, in making the product again. A "valve" is the part of a pipe that controls the flow of gas or liquid.

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

The "backup crew" are the people that replace the prime crew if any of them get sick or can't perform their mission.

That's three hours of **boredom** followed by seven seconds of **sheer** terror.

"Boredom" refers to the state of being bored, or uninterested.

"Sheer" is an interesting adjective meaning pure or completely.

You totally out foxed them, brother.

To "out fox" a person is to do something that is smarter or more clever than them.

You used up too much **fuel**. :: No, we were above the curve.

"Fuel" is another word for gas. The second sentence refers to the line in space that a spaceship must travel in order to reach it's destination without running into various problems.

We got to be up at 0 700.

In military language, '0 7 hundred' is the way to say 7AM (and note that 1PM is "13 hundred").

Three weeks prior to launch.

"Prior to" is another way of saying before. "Launch" refers to the actual launching or take off of a rocket.

This is the Saturn 4-b <u>booster</u>, and it shoots us away from the earth...

A part of the engine, like a thruster, that powers the rocket forward.

...until the moon's gravity actually grabs us and pulls us into a circle around the moon, which is called an orbit.

"Gravity" is the (Newtonian) force of nature that keeps objects close to each other. "To grab" something is to quickly and forcefully take it.

I take the controls and I steer it around.

In this case, "controls" refer to all the buttons and computerized equipment that the astronauts must use to control the spaceship. "To steer" a car or ship is to move it in a particular direction.

This door, it's called a hatch.

The small door used to get in and out of a ship or space module.

I can't believe they still have you doing <u>public appearances</u>.

Formal speeches and other events that give the public and news media a chance to see a particular person, in this case the astronauts.

Yes, but now I have your mother, and she's just had this <u>stroke</u>. A sudden illness in the brain, often caused by a loss of blood, that makes it difficult to take care of oneself.

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

In this case, to "go through" all that is to survive or endure a lot of emotional and time consuming effort.

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

A useful alternative to happy or satisfied.

You're going to miss <u>a hell of</u> a show.

A common colloquial expression that means worth while, or excellent.

The number 13 doesn't bother you? :: Only if it's a Friday.

Many people feel that a Friday on the 13th of the month is very bad luck.

Ken Mattingly has been doing some scientific experiments regarding that very <u>phenomenon</u>, haven't you?

A fact or event in nature, or anything that is very strange or unusual.

I had a black cat walk under the lunar module ladder and it didn't seem to be a problem.

Some people also think a black cat can bring bad luck, especially if it walks under a ladder!

Does it **bother** you that the public regards this flight as <u>routine</u>? "To bother" a person is to upset, annoy or irritate them. If something is "routine," it is common and easy to do.

There's nothing routine about flying to the moon; I can <u>vouch</u> for that. "To vouch" for something is to assert or state that it is true.

I'll be walking where there's 400 degrees difference between sunlight and shadow. I can't ever imagine <u>topping</u> that.

"To top" something else is a colloquial way of saying to do something that is even more impressive or amazing.

Thanks to a health scare, Jack Swigert replaces Ken Mattingly as the new crew gets ready for the big day.

We got some <u>blood work</u> back from the lab. Charles Duke has the <u>measles</u>. "Blood work" refers to tests that are done on a person's blood to test for various conditions or diseases. The "measles" is a childhood disease.

You've all been exposed to it.

If you have been "exposed to" a disease, this means that it is possible you may catch it because you were around a person who has it.

I've had the measles. :: Ken Mattingly hasn't.

Note that Jim mentions that he has already had the measles, because if you've had it as a child, you can no longer get it as an adult.

You want to break up my crew before the launch when we can predict each other's moves and read the tone of each other's voices?

"To predict" is a critical verb which means to tell what will happen in the future. In this case, a person's "moves" refers to their way of acting or communicating. The "tone" of a voice is it's sound or quality.

Ken Mattingly will be getting seriously <u>ill</u>, <u>precisely</u> when you and Haise will be ascending from the lunar surface.

"Ill" is a way of saying sick, and "precisely" means exactly. "To ascend" means to go up, and "lunar" is the adjective that refers to the moon.

Jim, that's a **lousy** time for a fever.

"Lousy" is an excellent word for very bad or horrible.

Jack Swigert has been out of the loop for weeks!

To be "out of the loop" means to be uninformed, or not know what is happening with a particular plan or project.

He's a <u>fine</u> pilot, but when was the last time he was in a <u>simulator</u>? In this context, "fine" means good or perhaps excellent.

A "simulator" is a machine that helps astronauts and pilots practice flying, without actually leaving the ground.

We can either <u>scrub</u> Mattingly and go with Swigert, or we can bump all three of you to a later mission.

"To scrub" usually means to wash or rub, though here it means to replace or eliminate. "To bump" means to hit gently, though in this case it means to push back until a later time.

I've <u>trained</u> for the <u>Fra Mauro highlands</u>, and this is <u>flight surgeon horse shit!</u>
"To train" for something is to practice it in order to get as good as possible. The "Fra Mauro Highlands" are the part of the moon that Jim was planning to visit. A "flight surgeon" is the doctor in charge of the health of the astronauts, and "horse shit," like "bullshit," is a colorful but vulgar way to refer to lies, nonsense, etc.

- Jim, if you hold out for Ken, you will not be on Apollo 13. "To hold out" for something is to absolutely insist on it.
- I know <u>it's their ass</u> if I get sick up there, but I mean, <u>Jesus!</u>
 In this case, "it's their ass" means it is them who will get in trouble if something goes badly. "Jesus" is a common way to express emotion such as anger or frustration.
- It will be a hell of a mission....<u>one for the books</u>.

 A way of referring to something that is so important that it will be discussed in history books in the future.
- Why don't I talk to Deke? I'm sure we can work this out. If two people "work it out," they agree on how to solve a problem or disagreement.
- This was my <u>call</u>. :: Must have been a <u>tough</u> one.

 In this case, a "call" is an important decision, and if it's "tough," this means that the decision was very difficult.
- <u>Trajectory</u> is holding <u>steady</u>; We're right on the line.

 A "trajectory" is the path that an object takes while moving through space. If it is "steady," it is stable or smooth.
- Houston, we're at 400,000 feet.....about to lose <u>signal</u>.

 Here, the "signal" refers to a radio signal in order to communicate.
- Reentry data is nominal and we have radio blackout.

 "Reentry" refers to the act of the spaceship going back into the atmosphere of a planet. "Data" is information, "nominal" means very little, and a "blackout" happens when no information or power is able to get through from one point to another.
- We're coming in too <u>shallow</u>. I'm going to <u>manual</u>.

 In this case, "shallow" refers to the angle at which a spaceship enters the atmosphere, and is the opposite of steep, or at 90 degrees.

 If a ship is flown "manually," it is done by hand, and not computer.
- Roger, 13. Ok, we're at 3 Gs. 5 Gs.
 Astronauts, police and others will use the "roger" to mean "I heard and understood." A "G" is a unit of force caused by gravity.
- We're coming in too <u>steep</u>. I'll stay in this <u>roll</u>, and see if I can pull us out. Here, "steep" refers to the sharp angle at which the spaceship is entering the atmosphere. If the ship is in a "roll," it is turning on itself as it moves forward.

12 Gs. We're burning up! Damn it!

A very common way of expressing anger or frustration.

I gave them a **false** indicator light at entry interface.

"False" means not true or correct. The rest of the sentence is the type of language that only astronauts would use, but you should know "interface" is the part of a computer one communicates with.

How are you feeling Freddo? :: Charbroiled.

A word that refers to meat that is cooked on an open flame or barbecue.

We don't want daddy to get our <u>germs</u> and get sick in <u>outer space</u>.

"Germs" are the very small organisms that can't be seen, but which

cause disease. "Outer space" is anything outside earth's atmosphere.

Hey boys, you're not giving you're mom <u>a hard time</u>, are you? "To give someone a hard time" is to make life difficult for them.

Oxygen burn system? :: <u>Check</u>. :: <u>Helmet restraint ring</u>? :: Check.

"Check" is a way of saying OK when a machine or system is being checked to see that it works. A "helmet" is a metal covering to protect the head, and the "restraint ring" is used to hold the helmet in place.

You're not about to <u>pop</u>, are you? :: No, I got 30 days to this <u>blast off</u>.

"To pop" is to make a sharp exploding sound, and to "blast off" is what a rocket does as it flies up into the sky. Here, both women are actually talking about the act of a woman giving birth, not a rocket taking off.

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

A "gypsy" is a member of a dark haired race that are known for often travelling and making their living by selling goods from their carts.

Jim, <u>you're all set</u>.

A colloquial way of saying that "you're ready."

Gene, we can go now. :: Save it for splashdown, guys.

The time when the space module lands in the water after a journey to outer space ("to splash" is to cause water to scatter or fly all over).

Apollo 13 <u>flight controllers</u>, <u>listen up!</u>

"Flight controllers" are those people who help guide planes and rockets by using computers. "Listen up!" is a slangy way of saying listen!

Give me a 'go' or 'no go' for launch.

A way of asking for approval or disapproval to let the rocket take off.

Booster. Guidance. Surgeon. Procedures. Network.

Some of the various parts or aspects of a take-off that must be checked.

Launch control, this is Houston. We are 'go' for launch.

Note that Mission Control is in Houston, Texas, but that the rockets take off, or launch, from the town of Cape Canaveral, Florida.

Padleader, what's your <u>status</u>? :: We are 'go' for launch. In this case, "status" refers to the condition of approval or non-approval for allowing the rocket to take off.

Apollo 13 heads toward the moon...and an indifferent country barely seems to notice.

This is it. A few <u>bumps</u> and were <u>hauling</u> the mail.

A "bump" is a sudden blow or shock, such as what a plane experiences when there is turbulence or violent weather. "To haul" something is to carry it from one place to another, often with lots of effort.

<u>T minus</u> 15, 14, 13.....<u>ignition</u>.

"T minus..." is what the announcer says in the seconds leading up to the take off of a rocket. "Ignition" is the actual second of lift-off.

We have lift-off. Houston, we have <u>cleared the tower</u> at 13:13. If the rocket "clears the tower," it has risen above the top of it.

Altitude, velocity right on the line.

"Altitude" is distance from the earth and "velocity" is another word for speed. This is a way of saying altitude and speed are exactly as planned.

Get ready for a little jolt, fellas.

A "jolt" is a sudden shaking or hit, often caused by an outside force like a storm. "Fellas" is a colloquial way to say fellows, or perhaps, guys.

Roger that.

A way of saying "OK, I understand."

We're going to <u>burn</u> those engines for a little bit longer.

In this case, "to burn" an engine is to use a lot of fuel to accelerate or go faster, in order for the rocket to be on the desired course in space.

It looks like we just had our glitch for the mission.

An excellent word for a small problem that can usually be easily fixed.

- This doesn't stop for me until he lands on that <u>aircraft carrier</u>.

 A large ship from which military jets can take off and land.
- Remember, you're proud, happy and <u>thrilled</u>.

 A useful adjective meaning very happy and excited.
- I'm going to go ahead and <u>get set</u> for <u>transposition</u> and docking.

 "To get set" to do something is to get ready to do it. "Transposition" is an educated word for the act of changing places or position.
- We recommend that you <u>secure cabin pressurization</u>.

 In this case, to "secure" something is to make sure it is safe or reliable.

 "Cabin pressurization" refers to the air pressure inside the spaceship.
- Frank Borman was <u>upchucking</u> most of the way to the moon on Apollo 8. "To upchuck" is a slangy and dated way to say vomit or throw up.
- If Swigert can't dock this thing, we don't have a mission.

 Jim's way of noting that if the command module and the lunar module cannot be connected together, they won't be able to continue.
- How is the <u>alignment</u>?

 "Alignment" refers to the way two or more objects are lined up, or fit together.
- Don't worry guys, I'm <u>on top of it</u>.

 To be "on top of" a situation is to be in control of it.
- Come on <u>rookie</u>, park that thing.

 A "rookie" is a person who is doing something for the first time, or who has little experience.
- Houston, we have hard dock.

 Jim's way of saying that the two parts of the spaceship (the lunar and command modules) have been successfully put together.
- OK Houston, we have LEM <u>extraction</u>. :: We <u>copy</u> that, 13. "To extract" one object from another is to remove it. In this case, "to copy" a message means to hear and understand it.
- I could eat the ass out of a dead rhinoceros.

 A very colorful way for Fred to say that he is very hungry!
 (A rhinoceros is a large animal found mostly in Africa).

We got a smooth one. :: By the numbers, so far.

If an operation is going "smoothly," this means that all is going well.

Here it comes, the constellation 'urion.'

A "constellation" is a group of stars that form the shape of an object, such as an animal. "Urion" sounds like a constellation, but is simply Fred joking with the word 'urine,' which is the official word for piss.

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

To "go on" about something is to continue to talk about it, usually in an emotional manner (The Beatles broke up in 1970).

Barbara, I know you're in mourning.

When a person is "in mourning," they are experiencing and showing great sadness, usually over the death of a person.

We're <u>broadcasting</u> to you tonight form an altitude of almost 200,000 miles away from the face of the earth.

"To broadcast" is to send out either TV or radio signals.

The vast expanse out of outer space.

"Vast" means huge, and an "expanse" is a wide open space.

We'd like to provide you....with the appropriate background music.

"Appropriate" is a useful adjective meaning suitable, correct or proper for a given situation. "Background music" is that music which nobody pays attention to, but people hear because it is playing softly nearby.

Do hit it there, Freddo.

"Hit it" is often used to mean turn on the radio (TV, computer, etc.)

That was supposed to be the theme from '2001,'

in honor of command module, Odyssey.

A "theme" can be a song that people think of when they think of a film, in this case the 1969 movie "2001: A Space Odyssey."

All the <u>networks</u> <u>dumped</u> us. One said we made

going to the moon as exciting as a trip to <u>Pittsburgh</u>.

"Networks" refers to the major television companies. If the networks "dump" a show or news event, they decide not to broadcast it (in this case, because Americans no longer care about moon trips). Pittsburgh is large city in the state of Pennsylvania.

This is all the <u>channels</u> we get, Mrs. Lowell.

A "channel" is another word for a TV station.

Do they know they're not on the air?

If something is "on the air," it is being broadcast live over TV or radio.

If anyone from the IRS is watching, I forgot to file my 1040 return.

The IRS is the Internal Revenue Service, which is the government agency which collects taxes. "To file" a paper is to officially fill it out and give it to an office to be recorded. A "1040 return" is the most wellknown type of tax form, which most Americans file by every April 15.

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

"That's no joke" is a way of saying that the situation is serious. In this case, to "jump on" a person means to make life difficult for them.

Fred Haise and I will float through this access tunnel.

"To float through" something is to gently move through the air. An "access tunnel" is a tube that allows travel from one place to another.

That stir is going to be on both H2 and 02 tanks?

"To stir" a liquid is to mix it with a spoon, though here it refers to the shaking up of gases that are stored on the ship. H2 is the gas hydrogen, and 02 refers to the gas oxygen.

The skin of the LEM is only as thick as a couple of layers of tinfoil, and that's all that protects us from the vacuum of space.

"Tinfoil" is thin aluminum covering, used to wrap sandwiches. A "vacuum" is a word for space that has nothing in it (not even air!)

We can get away with this because the LEM is

designed only for flight in outer space.

"To get away with" something is to do something bad, illegal or dangerous without getting into any trouble.

Fred Haise, Renaissance Man.

A "Renaissance Man" is a guy who has lots of different types of talents and interests.

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

A "bang" is a loud noise. The "cabin" refers to the living area inside the spaceship, and a "repress valve" is a switch that stops the flow of a gas or liquid.

He gets our hearts going every time with that one.

Jim's way of saying that Fred scares them and makes their hearts beat fast when he makes that kind of banging noise. We're about to close out the Aquarius and return to the Odyssey.

"To close out" something is to shut it down. Remember that Aquarius is the lunar module and Odyssey is the bigger command module.

They might <u>air</u> a few minutes of it on the news tonight. :: <u>You'd think so</u>. "To air" a show is to broadcast it on TV. The second sentence is Marilyn's way of saying "I would hope so!"

We've got a couple of house keeping procedures for you.

This refers to routine or normal things that must be done on a regular schedule, such as checking the various control instruments.

An explosion rocks the spaceship, and Apollo 13 finds itself in crisis.

Houston, we have a problem. We have a lot of <u>thruster</u> activity.

The first sentence here is the most famous line in the movie.

"Thruster activity" refers to the thruster engines, which are used to push the rocket ship forward with great amounts of energy.

We've got multiple caution and warning.

"Multiple" is an important word meaning several or many, and "caution" means warning, and is used as a way of telling people to be careful. All of this is Jim's way of saying the computers are giving several different types of warnings.

<u>Jesus</u>, they're <u>heart rates</u> are <u>skyrocketing</u>.

"Jesus" is used to express great emotion, like shock or anger. "Heart rates" refers to how fast the astronauts' hearts are beating, and "to skyrocket" means to go up very fast.

ECOM, is this an <u>instrumentation</u> problem, or are we looking at a <u>power loss</u>? If a problem is related to "instrumentation," it is the instruments, or machines that read information, which are broken. If there is a "power loss," this means that electrical power is no longer available.

I'm reading a quadruple failure. That can't happen.

The failure or malfunction of four things at the same time.

The LEM might have been hit by a <u>meteor</u>.

A small piece of material that flies through space, like a comet.

Main Bus B is reading zip right now.

"The main bus" is a group of computerized instruments.

"Zip" is a common colloquial word for 0 (zero).

We got a wicked shimmy up here.

"Wicked" is a powerful word that means evil, or in this case, horrible. "To shimmy" is to move, wobble or shake back and forth, though note here the word is used as a noun, which is rare.

I'm going to try and get us out of this <u>lurch</u>.

A "lurch" is a sudden movement in one direction, or, as in this case, a very difficult situation.

We keep <u>flirting</u> with <u>gimbal lock</u>.

"To flirt" with somebody is to play with them in a romantic way, though here it means simply to get close to. A "gimbal lock" is an instrument for measuring direction, and is often used in this film.

We need a confirmation. What systems do you have down?

A "confirmation" is information that proves or verifies a belief. If a system, computer or machine is "down," it is no longer working.

Houston, we are <u>venting</u> something out into space. :: It's got to be the oxygen. "To vent" is to spray, discharge or shoot out something from inside.

Quiet down. Let's stay cool, people.

A colloquial way of saying to remain calm.

I want everybody to alert your support teams.

"To alert" a person is to warn them. "Support teams" are the people that help the individual project leaders do what they have to do.

Tank 2 is 218 PSI and falling.

A "tank" is a container for gas or liquids. "PSI" is a useful scientific abbreviation which means pounds per square inch.

Let's look at this from a <u>standpoint</u> of <u>status</u>.

"Standpoint" is another way to say point of view or perspective. "Status," in this case, refers to general condition or ability to function.

I recommend we **shut down** the reactant valve of the <u>fuel cells</u>.

"To shut down" a machine or device is to turn it off. "Fuel cells" are power sources that are usually housed in batteries.

What the hell good is that going to do?

A common addition to WH questions to express emotion such as anger or frustration.

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

A "leak" is a tiny hole that allows gas or liquid to escape from a pipe or container. "To isolate" a leak is to contain or control it.

From my chair here, this is the last option.

One way saying the only choice that is left.

Yes Houston, we copy. We just lost the moon.

Jim's way of saying that he realizes that the mission to the moon has just been cancelled, and that getting home is now their only goal.

How long does it take to <u>power up</u> the LEM? :: Three hours by the <u>checklist</u>.

"To power up" a machine is to provide it with electrical power.

A "checklist" is a list of things that must be done for a project.

Before the batteries die on us, let's <u>power down</u> everything so we can save as much as we can for reentry.

"To power down" is to stop using and then cut off electrical power. In this case, "reentry" refers to the spaceship's attempt to reenter the earth's atmosphere from outer space.

Ok, listen up. Here's the drill.

"Listen up" is a colloquial way of asking people to listen. A "drill" is an activity that people practice in order to do it as well as possible.

The essential hardware only.

"Essential" is a important word meaning critical or necessary.

"Hardware" refers to physical machines, such as computers.

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

A "guidance system" is a computerized program that allows a ship to travel in a desired direction without getting lost.

We gotta transfer all <u>control data</u> to the LEM computer.

In this case, computerized information that will let the astronauts control and guide the LEM module while they are in it. Note that 'have got to'---->'gotta' in rapid speech.

The lunar module just became a <u>lifeboat</u>.

A small boat that is found on large ships that is supposed to save passengers if the ship begins to sink.

You gotta do it fast, or you're not going to be able to <u>navigate</u> up there.

"To navigate" a ship means to control its direction.

We're looking at less than 15 minutes of <u>life support</u> in the Odyssey. In this context, "life support" refers to the breathable air that is left on the command module (which is called the Odyssey).

If they can't get they're guidance data transferred...
they won't even know which way they're <u>pointed</u>.
If a ship is "pointed" in a certain direction,
it is travelling or heading toward that direction.

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

"Man" is a common colloquial way to start a sentence, though it has no particular meaning. "Debris" is the remains of something that has been destroyed or exploded.

I have completed these gimbal <u>conversions</u>, but I need a double check of the arithmetic.

A "conversion" changes information or data from one system to another. A "double check" is a verification that something is correct.

We've got <u>negative visibility</u> in our star field and if this <u>paper</u> <u>work</u> isn't right, <u>who knows</u> where we'll end up out here.

"Negative visibility" is the complete inability to see anything. In this case, "paper work" refers to math calculations made on paper. "Who knows" is a common way of starting a sentence when you have no idea what will happen in a particular situation.

The emergency has <u>ruled out</u> any chance of a lunar landing, and could endanger the lives of the astronauts themselves.

"To rule out" an option or plan is to decide that there is no possibility of doing it.

The LEM's rocket engine will be used in <u>aborting</u> the mission. "To abort" a mission is to stop or discontinue it in the middle.

<u>Recapping</u> what has happened now; The Apollo 13 astronauts may be in grave danger.

"To recap" a story is to summarize it. If a person is in "grave danger," there is a chance that they can be seriously hurt or even killed.

No, don't give me that NASA <u>bullshit!</u>

A widely used, vulgar and excellent slang word for lies, distortions, half-truths, and nonsense in general.

Houston, we have no <u>altitude control</u> on Aquarius.

The ability to keep a spaceship flying at the correct direction or height.

We're all out of whack.

If something is "out of whack," it is not functioning correctly.

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

Jim's colorful description of how difficult it is to control the spaceship when so many of the computers and control buttons don't work.

Freddie, inform Houston that I'm well aware of the god damn gimbals.

A vulgar but common expression that is added to show anger. (Remember, a 'gimbal' is a mathematical word that is only useful in specific engineering contexts).

Aquarius, this is Houston, we got you back on <u>Vox</u>.

The acoustic system that allows everyone at Mission Control to hear what the astronauts are saying.

You have a hot mike; We are reading everything you say.

A "hot mike" is a slangy way of saying that the microphone is on. In this case, "to read" a person is to hear them (but this would only be used in an official military or aviation context).

It's only by a very <u>narrow margin</u> that we're going to get Lovell, Haise and Swigert back alive.

A "narrow margin" is a thin piece of space. This is a way of saying that it will take great effort and some luck to save the astronauts.

This has been a very close call.

A good expression to describe a situation in which a disaster has barely been avoided.

We're not out of the woods yet. Not by a long shot.

To be "out of the woods" means to reach safety after being in a dangerous or difficult situation. "Not by a long shot" is a way of saying not even close.

It's going to get **awfully** cold in here.

An excellent adjective which means very or extremely.

We'll just have to deal with that later.

"To deal with" something means to take care of it.

We <u>confirm</u> shut down. Lunar module now in control.

"To confirm" something is to verify it.

We're going to have <u>to execute some sort of burn</u>; <u>It's just a matter of when</u>. In this context, "to execute a burn" is to use the engines to push the spaceship in a certain direction. The second sentence is saying that the time must be decided, but the decision to actually do it has been made.

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

If a ship is "off course," it is not following the correct direction. In this case, "to project" something is to estimate it. In military and other official contexts, saying "over" is a way to end a sentence.

The crippled spaceship orbits the moon, and as saving power becomes the top priority, the astronauts retreat to the LEM.

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

"To improvise" something is to do it without planning or practice, often because a sudden need has changed previous plans.

No Sir, we get them in on a <u>free-return trajectory</u>.

In this case, a flight path in which the spaceship continues to fly around the moon, instead of attempting to turn around immediately.

I agree; We use the moon's **gravity** to <u>slingshot</u> them around.

"Gravity" is the natural force that pulls things to big objects like planets and moons. "To slingshot" an object is to quickly shoot it through space (A slingshot is a Y-shaped fork with a rubber band for shooting).

No, we've got to do <u>a direct abort</u>. We do an <u>about-face</u> and we bring the guys home right now.

"A direct abort" is an immediate cancellation of the mission. To do an "about-face" is to turn around immediately, and go back.

I'm not going to sugarcoat this for you!

"To sugarcoat" something is to try and make it sound less bad or dangerous than it really is. A fun and useful verb.

Once we get them around the moon, we'll <u>fire up</u> the LEM engine, make a long burn, <u>pick up</u> some speed and get them home as quick as we can.

"To fire up" an engine is to use the gas or power within it. "To pick up" speed is to accelerate, or continue to go faster.

Run it by the FAO.

To "run an idea (or suggestion) by" a person is to see what they think of it. The FAO is a department within NASA.

Nixon. He wants odds.

The "odds" of something happening are the statistical chances that it will occur (25%, 50%, etc). Here, President Nixon wanted to know.

Expect loss of signal in one minute.

This is a reference to the loss of radio signal as the astronauts flew toward the far side of the moon.

Neil and Buzz's old neighborhood.

A reference to Neil Armstrong and Buzz Aldrin, the first two men on the moon, and the part of the lunar surface that they visited.

So long earth; Catch you on the flip side.

"So long" is a common way of saying goodbye. The second sentence is a very slangy but still used way of saying "See you later."

It must be an **awe inspiring** sight; I can't wait to see it myself.

If something is "awe inspiring," it is so amazing or sensational that it creates a great emotional reaction of respect, fear or wonder.

The problem now is not an <u>adequate</u> oxygen supply, but the rate of consumption of water.

"Adequate" is another word for sufficient, or perhaps enough.

"Consumption" is the act of using or consuming a product.

It's Fra Mauro; I can see our landing site.

The part of the lunar surface where Apollo 11 would have landed, had there not been an accident.

Look at that crater.

A giant whole in the surface of a planet.

We're <u>picking you up</u> at a <u>velocity</u> of 7,052 feet per second and a distance from the moon of 56 nautical miles.

In this case, "to pick up" means to observe, or read through computer equipment. "Velocity" is an official word for speed, and a "nautical mile" is a unit of measurement used by sailors, pilots and astronauts.

I got an itch to take this baby down and do some prospecting.

If a person has "an itch" to do something, this means they want to do it. "To prospect" is to search land for gold, silver and other valuables.

Gentlemen, what are your intentions? I'd like to go home.

A person's "intentions" are their plans to act in a certain way.

We'll need a <u>contingency</u> if we lose communication with Houston. A "contingency" (or contingency plan) is a backup plan that is used if the original plan cannot be successfully completed.

Let's get an idea where we <u>stand</u> on the <u>consumables</u>.

If a person wants to find out where they "stand" in a situation, they are trying to find out all the relevant facts. "Consumables" refers to anything that's consumed or used, from water and gas to food.

Power is everything. Without it, they don't talk to us, they don't collect their trajectory, they don't turn around their heat shield...

In this case, to "collect their trajectory" is to gather the information needed to help guide the spaceship in the right direction. A "shield" is a protective metal layer, in this case to keep out extreme heat.

With everything on, the LEM draws 60 amps.

Note that machines "draw amps," which is one way of saying to use electricity. An amp is a standard unit of electrical power.

We gotta turn off <u>radars</u>, cabin heaters, <u>instrument</u> <u>displays</u>, the guidance computer, <u>the whole smash</u>.

"Radars" are tools that locate objects in space. "Instrument displays" refers to the computer equipment that the astronauts use to collect information. "The whole smash" is a slangy way of saying everything.

The more time we talk down here, the more <u>juice</u> we waste up there. "Juice" is a slang word for electrical power.

<u>Is that the deal?</u> :: That's the deal. "Is this the way it has to be?"

We've never even simulated it before.

"To simulate" an event is to practice experiencing it with the use of computers and other equipment, but without the risk of real life.

Well, we're going to have to **figure it out**.

"To figure out" a problem is to solve it. Very useful and common.

I want people in our simulators working reentry scenarios.

A "scenario" is a possible outcome, and thus this refers to possible situations in which the astronauts reenter the earth's atmosphere.

I want you guys to find every engineer who designed every <u>switch</u>, <u>circuit</u>, <u>transistor</u> and light bulb up there.

"Switches" and "circuits" are devices in electronic equipment that are turned on and off. A "transistor" is a key part in radios, computers, etc.

- Then talk to the guy at the <u>assembly line</u> who actually built the thing. A long moving belt inside a factory where workers put together various manufactured products, from cars to computers.
- Find out how to squeeze every amp out ofthe god damn machines. "To squeeze every amp" out of a machine is to try and figure out the most efficient way to use the machine without wasting electricity.
- I want this mark all the way back to earth <u>with time to spare</u>. If you do something "with time to spare," there is still time left after completing what you wanted to do.

We've never lost an American in space and we're sure as hell not going to lose one <u>on my watch</u>.

If something happens "on your watch," this means you were in charge of the organization when it happened. This is Gene's way of saying he won't let the astronauts die while he's in charge of the mission.

Failure is not an option!

A poetic and defiant way of saying "We will not fail."

We got a lot of people <u>working the numbers</u> on this one, Ken. "To work the numbers" of a problem is to do the math involved.

The command module is going to be <u>frozen up</u> pretty good by then. If a machine is "frozen up," it is perhaps physically cold, and unable to function.

If we see it spike, that's sayonara for the guidance computer.

"To spike" is to suddenly go up very high, but only for a brief time. "Sayonara" is the Japanese word for goodbye, though Americans will use it to mean the end, or death.

John's brought me <u>up to speed</u>; What do we have left in the batteries? To bring someone "up to speed" is to update or inform them on all the relevant facts of a situation.

We gotta get started on some <u>short cuts</u> for power-up.

A "short-cut" is a faster way to do something than the usual way.

You know how short? :: It's all in the <u>sequencing</u>. "Sequencing" refers to the order (or sequence) in which a series of things is done.

<u>Let's get this show on the road</u>; Put him in space, fellas. A colloquial way of saying "Let's start."

We don't want you to make any more waste dumps;

The venting may push you off course.

In this case, a "waste dump" is the expelling of human waste (shit) from the spaceship. If it's "off course," it's not going the right direction.

That's it; We just put Sir Isaac Newton in the driver's seat.

Once they turned off the engines, the gravity of the moon and the earth were controlling the ship (Newton discovered the force of gravity).

As the spacecraft heads back to earth, Mission Control desperately looks for a way to save the astronauts from carbon-dioxide poisoning.

Gene, we have a situation developing with the <u>carbon dioxide</u>.

A poisonous gas that is created from people breathing in a closed space when there is not enough air circulation.

Five <u>filters</u> on the LEM, which were meant for two guys for a day and a half. A device through which a liquid or gas is passed in order to clean or purify it. Here, the filter is used to prevent carbon dioxide poisoning.

They're already up to eight on the gauges.

A "gauge" is a device that measures various data. In this case, how much carbon dioxide is in the air on in the module.

Anything over 15 and you get <u>impaired judgement</u>, blackouts, the beginnings of brain asphyxia.

<u>exouts,</u> the beginnings of brain <u>aspnyxia</u>.

"Impaired judgement" is the reduced ability to think clearly. A "blackout" is the sudden but short loss of consciousness.

"Asphyxia" is serious injury or death caused by lack of oxygen.

What about the scrubbers on the command module?

"To scrub" is to clean by brushing, and thus "scrubbers" are a part of the filter that in this case helps clean the air.

They take <u>square</u> <u>cartridges</u>; The ones on the LEM are round.

If something is "square," it's shaped like a box, with all four sides equal. A "cartridge" is usually a metal tube inside a machine.

Tell me this isn't a government operation.

Gene's way of saying that government departments often work in an inefficient manner (like using cartridges that don't fit with each other).

This just isn't a <u>contingency</u> that we've <u>remotely</u> looked at.

In this case, a "contingency" is a possibility, and "remotely" is an adverb that means distantly or briefly. This is a way of saying that they had not even considered this possibility.

Those <u>Co2</u> levels are going to be getting <u>toxic</u>.

"C-o-2" is a short way of referring to carbon-dioxide.

If something is "toxic," it is dangerous or poisonous.

I suggest you invent a way to put a square <u>peg</u> in a round hole...<u>rapidly</u>. "A peg" is a wooden or metal part designed to fasten two things together (If it is square, it won't fit in a round hole!). "Rapidly" is another way of saying quickly.

The people upstairs have handed us this one and we gotta <u>come through</u>. Here, to "come through" means to do the assignment successfully.

They want to put a <u>transmitter</u> up on the lawn.

A large metal tower designed to send TV and radio broadcast signals.

I realize how hard this is Marilyn, but the whole world is <u>caught up in it</u>. If a person or group is "caught up" in something, they have become extremely interested in it.

If they have a problem, with that, they can <u>take it up</u> with my husband. "To take up" a topic with somebody is to discuss it with them.

It hurts when I urinate.

"To urinate" is the official verb meaning to go to the bathroom, or more colloquially, to piss or take a leak.

You're not getting enough water. :: I'm drinking my <u>ration</u>, the same as you. A "ration" is the amount of a product that one person is allowed to use when legal limits are created due to shortages.

I think old Swigert gave me the clap.

A funny colloquial expression for gonorrhea, a well known sexually transmitted disease.

He's been pissing in my relief tube.

"To piss" is to urinate. A "relief tube" is the plastic tube that the astronauts use to urinate.

That will be a hot one at the debriefing for the flight surgeon.

In this case, "a hot one" means a topic of great interest. A "debriefing" is a meeting that takes place after a difficult mission to find out as much information from the participants as possible.

We're coming in too shallow and fast.

In this case, a description of the angle at which the astronauts are heading toward the earth's atmosphere. If the angle is too "shallow," it is not direct or steep enough to penetrate the atmosphere, and the astronauts could bounce off into space.

Listen, they had us burn too long. At this rate, were gonna skip out of the atmosphere and never get back.

Swigert's way of saying that they must change their direction and angle, or risk being unable to enter the atmosphere. If the ship "skips out," it will bounce off the atmosphere and back into space.

How did you figure that?

In this case, "to figure" means to solve or estimate.

Jack, they got half the <u>Ph.Ds</u> on the planet working on this.

The highest level graduate degree that a university offers.

That's duly noted; Thank you, Jack.

If something is "duly noted," it is officially heard and understood, though the listener doesn't necessarily agree with the speaker.

This piece of shit is going to get you home.

A vulgar but common way of referring to anything that is bad or in poor quality. In this case, a reference to the lunar module.

What was that gauge reading before you <u>hit the switch</u>? To "hit a switch" is to turn it on or off.

They asked me to <u>stir</u> the tanks and I stirred the tanks!
In this case, "to stir" the tanks is to shake the gas inside them.

Stop kicking yourself in the ass.

"Stop feeling guilty about what you did."

We are not going to go <u>bouncing off the walls</u> for 10 minutes, because we'll end up right here with the same problems.

"To bounce off the walls" is Jim's way of saying to scream and argue with each other ("To bounce off" something is to hit it and then spring back from the act of hitting it).

Yes, our Co2 gauge has jumped four <u>notches</u> in the last hour.

A "notch" is a mark that measures degrees or the level of something.

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

A set of actions designed to do something correctly.

Maybe I should just hold my breath.

If a person holds their breath, they try to stop breathing.

Heads up people, look out now.

A way of telling people to stop being so depressed.

Lithium hydroxide <u>canisters</u>. <u>Duct tape</u>.

A type of container, in this case for a type of gas. "Duct tape" is a type of very strong and thick tape that is usually silver color.

With each breath, the three men <u>expel</u> more of the poisonous gas into the lunar module <u>cockpit</u>.

"To expel" is to force out, as when air is forced out of the lungs when breathing. The "cockpit" of a plane or spacecraft is where the pilots or astronauts work, and from where they control the ship.

The scrubbers intended to keep the lunar air breathable....are quickly becoming saturated.

If an object is "saturated," it is completely filled up or soaked. In this case, the filter are scrubbers are filled with toxic gas.

They're working on their back-up facilities.

In this case, the "back-up facilities" refer to the lunar module, which will serve as the astronauts home since the command module has been shut down in order to save electrical energy.

This is the most serious situation we've ever <u>encountered</u> in manned space flight.

"To encounter" a situation is to experience it, or have to deal with it.

The search continues for how to find the needed electrical powerand just the right path to reenter the earth's atmosphere.

We <u>overloaded</u>. There must be a <u>short-circuit</u> between step 7 and 10. "To overload" is to take in too much power too quickly. A "short-circuit" is a physical break in the transmission of electric power.

Do you need a **break**, Ken?

A common and useful way to say a short rest.

Don't you worry. If they could get a <u>washing</u> <u>machine</u> to fly, my Jimmy would land it.

A "washing machine" is for either washing clothes or dishes.

He's going to grant you an extension on your income taxes since you are most <u>decidedly</u> out of the country.

"To grant an extension" to a person is to give them more time to do something, in this case to pay taxes. "Decidedly" means definitely.

I am <u>sick and tired</u> of the entire Western World

knowing how my kidneys are functioning.

To be "sick and tired" of something is a common way of saying you no longer want to be involved with it, or more colloquially, that you're fed up with it. "Kidneys" separate waste from the blood.

We just had a drop out of your biomed sensors.

In this case, a "drop out" is a sudden disappearance. "Biomed sensors" are devices that send back information to a computer on bodily functions such as heart rate and blood pressure.

It's just a little medical <u>mutiny</u>; I'm sure the guys are still with us. A "mutiny" is a sudden revolt against the captain of a ship.

Let's cut them some slack, OK.

"To cut somebody some slack" is to treat them with patience and tolerance, even if they have violated certain rules ("Slack" is the extra rope that is not needed when two things are tied together).

It's not the <u>velocity</u>; It's the <u>angle</u>.

"Velocity" is speed while "angle" is the direction from which an object is coming.

At this rate, they <u>nick</u> the earth's atmosphere and bounce off into space. "To nick" a surface is to lightly cut into it (Men do this shaving).

Fire the engines and get them on course.

"To fire" the engines is a mechanic's way of saying to get them started. If they are "on course," they're following the right path or doing what they're supposed to do.

 $\underline{\text{Negative}}$ on that; We can't $\underline{\text{spare}}$ power for the computer.

"Negative" is a NASA/military way of saying no. If you can't "spare" something, you can't afford to give it up because it's so rare or precious.

Without the computer, what do we use for <u>orientation</u>?

A key word meaning sense of direction.

We're trying to <u>hash something out</u> down here. Standby. "To hash out" something means to try and put it together.

All we need is <u>one fixed point</u> in space.

For a pilot or astronaut, a "fixed point" is a non-moving point of reference, that will allow them to keep a sense of direction.

In order to enter the atmosphere safely, the crew must <u>aim</u> for a <u>corridor</u> just two and half degrees wide.

"To aim" for something is to point or steer toward it.

Here, a "corridor" is a narrow pathway to travel in.

If they're too <u>sharp</u>, they'll <u>incinerate</u> in the steadily thickening air....

A "sharp" angle is wide, and might be 45 degrees or more.

"To incinerate" is to burn up in a hot fire.

....and if they're too shallow, they'll <u>ricochet</u> off the atmosphere like a rock skipping off a <u>pond</u>.

"To ricochet" off of a surface is to touch it and then bounce off of it. A "pond" is a small area of water that is much smaller than a lake.

The crew would have to hit a <u>target</u> no thicker than this piece of paper. A "target" is a specific object which you desire to reach (in this case the earth's atmosphere, at the right angle).

Ok people, on your toes.

"On your toes" is a way of telling people to be awake, alert and careful.

If the earth starts <u>drifting</u> down, you need to <u>thrust aft</u>, not forward.

If a ship starts "to drift," it begins to gently move in the direction that an outside force, like a wind or current, pushes it. "To thrust aft" is to push the ship backward, but note 'aft' is a very rarely used naval word.

Are you <u>up to this</u> Freddo? :: I'm with you.

To be "up to something" is to feel strong or brave enough to accept the challenge of a very difficult mission or assignment.

Hold it! Hold it steady!

In this context, a key word which means firmly or without sudden changes in speed or direction.

Houston, we have <u>shut down</u>. That's close enough, good work.

When a machine is "shut down," all the electric power is turned off.

Now we gotta get them in. Tell me about the <u>power-up procedures</u>. The actions needed to bring electrical power, in this case, back to the command module.

I want to power up guidance....communications....the <u>pyros</u> for the parachutes and the command module thrusters.

"Pyros" is a root word for fire or heat, and parachutes are the devices made of cloth that open up, allowing objects and people to fall slowly from the sky.

The thrusters are going to put you over budget on amps.

One way of saying the engine thrusters will use up too much electricity.

I'm not making this stuff up.

"To make up" stuff is to create a story or facts from one's own head or imagination, instead of reporting what has really happened. "Stuff" is a common word for things in general, from ideas to physical objects.

Let's start from scratch. Clear the board.

"To start from scratch" is a common way of saying to begin a project or discussion again, from the very beginning.

I've had an engine <u>flame out</u> a few times in an aircraft and I was kind of curious if it was going to light up again. If an engine "flames out," it loses power and dies.

I'm in a <u>banshee</u> in <u>combat conditions</u> so there's no <u>running lights</u> on the <u>carrier</u>.

A "banshee" is a military plane, and "combat conditions" are those flying conditions that exist during a war. "Running lights" are the lights on a runway to help planes land, and in this case, a "carrier" is a large naval ship.

My radar had jammed and my homing signal was gone.

If a machine "jams," it gets stuck and fails to work. A "homing signal" is a device that allows a plane to find its way back home.

Somebody in Japan was using the same frequency.

A reference to radio frequency, which allows the sending of communication signals through the air.

Then suddenly, <u>zap</u>, everything <u>shorts out</u> right there.

"Zap" is a slang word that refers to a sudden attack or explosion. If an electrical system "shorts out," the electricity suddenly dies.

I know I'm running out of fuel, so I'm thinking about <u>ditching</u> it right there in the ocean.

"To ditch" a plane in the ocean is to intentionally crash it in the water.

It was the <u>algae</u>; It was that <u>phosphorescent</u> stuff that gets <u>churned up in the wake of</u> a ship.

"Algae" is the green plant that grows on the ocean floor, and if it is "phosphorescent," it shines or glows in the dark. If the algae is "churned up," it is pushed up, in this case to the ocean's surface. If something happens "in the wake of" a ship, it happens because the ship has come by.

You never know what events are going to <u>transpire</u> to get you home. "To transpire" is a fancy way of saying to happen.

Houston, can you confirm a <u>burst helium disk</u>?

If something is "burst," it has suddenly broken open, like a balloon that has been given too much air or water. A "helium disk" is a container of helium, which is a type of gas.

We sure could use the reentry procedure....

we just can't throw this together at the last minute.

"To throw together" something is to put it together very quickly, without planning or much thought.

We're going to go over it <u>step by step</u> so that there are no <u>foul-ups</u>.

To do something "step by step" is to do it very carefully, in small pieces so that it's easily understood. A "foul-up" is a bad mistake.

We have an <u>umbilical</u> that powers from the command module to the LEM. In this case, an electrical cord (An 'umbilical cord' is also what connects a baby to its mother until just after birth).

Reverse the flow and see if we can draw the four amps from the LEM batteries before we <u>cut it loose</u>.

"To cut loose" something is to free it, so that it goes off on its own. Note that Jim wants to get the needed electricity by transferring the electricity in the LEM's batteries to the command module.

I don't want the whole bible; Just give me a couple chapters. Gene's way of saying he doesn't need a perfect plan, as long as it works well enough. I think we got it, buddy.

A common slang word for friend.

I was getting a little blurry, there.

If a person's eyes are "blurry," they're so tired that they can't focus or see well.

Are the flowers <u>blooming</u> in Houston?

When a flower "blooms," its petals grow outward toward the sky.

Just distract her when the heavy predictions come in.

"To distract" a person is to take their mind off what they were thinking about. In this case, a "heavy prediction" is a colloquial way of saying a guess about the future that includes something horrible or tragic.

Yeah, we'll give it a shot.

A common and colloquial way to say try or attempt.

Don't worry Jack, I'll talk you through it.

"To talk a person through" a project is to explain step by step how to do it.

Ken, there's an awful lot of condensation on these panels.

"Condensation" is drops of water that forms on a surface.

A "panel" is flat board on which instruments are found.

We'd like you and Freddo to transfer

some **ballast** over to the command module.

"Ballast" is anything that can be used to add weight to a vehicle (Mission control wants the astronauts to add weight to the command module before they reenter it for the final part of the trip back to earth).

We were expecting you to be <u>toting</u> a couple hundred pounds of moon rocks. "To tote" something is to carry it (often in what is called a tote bag).

As her husband prepares to <u>jettison</u> his lunar module life boat, Marilyn Lovell waits with her children.

"To jettison" something is to throw it away, often by throwing it overboard and into the ocean.

Only the oldest son is absent, as he <u>holds vigil</u> with his classmates.

"To hold vigil" is to wait patiently for some serious purpose.

With a <u>crippled</u> command module, and surviving by using the LEM's power systems, there can be no easy maneuver.

"Crippled" means disabled or unable to function (but note that this word should no longer be used for people). A "maneuver" is any action that takes great skill and concentration.

I wish you were here to see it. :: <u>I bet</u> you do.

A very common way of saying "I'm sure..."

Way to go, Jack!

A colloquial way of congratulating a person for a job well done.

We are looking at a <u>typhoon</u> warning on the edge of <u>the prime recovery zone</u>. A "typhoon" is a very violent storm. In this case, "the prime recovery zone" is where the command module is expected to land in the ocean.

If the heat shield is even slightly cracked, the extreme cold could <u>split it wide open</u>.

"To split wide open" a shield or board of any kind is to basically break it into two, leaving it useless.

The <u>chutes</u> may not open at all, causing the spacecraft to hit the water not at a gentle 20 miles per hour, but at a <u>suicidal</u> 300 miles per hour.

"Chutes" is an abbreviation for parachutes, the cloth devices which allow objects to float slowly down to earth. If something is "suicidal." it is so dangerous that people who do it are likely to die.

The astronauts return to the crippled command module, and begin the final leg of their amazing journey home.

It's about time to bail out of this ship, Freddo.

"To bail out" of a ship is to leave it, often because it is so dangerous.

You are a mess.

In this case, a "mess" is a way of saying that a person looks very bad, exhausted or sick.

Is everyone <u>strapped in?</u> We're getting real close.

"To strap in" a person is to safely tie them to a seat with a safety belt.

I was getting a little <u>punchy</u>, and I didn't want to cut the LEM loose with you guys still in it.

"Punchy" means to be slightly drunk, silly or out of control.

Farewell Aquarius, and we thank you.

A poetic word for goodbye.

The trajectory may be off, the thrusters may be frozen and the guidance system might be malfunctioning.

"To malfunction" is to not work correctly.

Clearly we have some <u>obstacles</u> to <u>overcome</u>.

"Obstacles" are difficulties that stand in the way of success, and to "overcome" them is to find a way to get around them.

With all due respect, Sir, I believe this will be our finest hour.

"With all due respect" is a way of starting a sentence when you want to respectfully disagree with what has just been said. "Our finest hour" is a poetic way of referring to a time of great accomplishment or victory.

Gentlemen, it's been a privilege flying with you.

A special right given to few people, or, as in this case, a great honor.

No reentry ship has ever taken longer than

three minutes to emerge from blackout.

"To emerge" is to appear, and here, "blackout" refers to the cut off of communication signals as the module enters earth's atmosphere.

Odyssey, Houston, do you read me?

A NASA/military way of asking "Can you hear me?"

We'll learn if that heat shield has withstood the inferno of reentry.

"To withstand" an attack is to survive it. An "inferno" is a great fire.

Houston, we're at stable one....The ship is secure.

A good word for safe or protected against danger.

It was determined that a damaged <u>coil</u> built inside the oxygen tanks <u>sparked</u> during our stir and caused the explosion that crippled the Odyssey.

A "coil" is a twisted metal ring. If something "sparks," it shoots off tiny bits of material which are on fire, which can cause a large fire.

It was a minor defect.

An important word for a problem, imperfection or failing.

Ken Mattingly <u>orbited</u> the moon as command module pilot of Apollo 16. "To orbit" a planet or moon is to circle around it.

The seven <u>extraordinary</u> days of Apollo 13 were my last in space.

A powerful adjective meaning amazing or incredible.

Apollo 13

Possible Topics for ESL Class Discussion

- 1. Why did we go to the moon? Why did we stop? Should we go back? What should be the goals of space programs in the future?
- 2. What did the Apollo space missions reflect about US culture and society?
- 3. Had you been the right age in the 1960s, would you have wanted to be an astronaut?
- 4. For you, what were the scariest problems that the astronauts faced?
- 5. Do you agree that Apollo 13 was a "successful failure?"
- 6. Did this movie have many heroes? Who were they?
- 7. What did you like and not like about this film?