

# Leadership in Cinema



Wildland Fire Leadership Development Program

## APOLLO 13

(Based on a true story)

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Phone: 208-387-5318

Studio: Universal City ..... Studios Released: 1995

Genre: Drama ..... Audience Rating: PG

Runtime: 140 minutes

## Materials

VCR or DVD, television or projection system, Wildland Fire Leadership Values and Principles handouts (single-sided), notepad, writing utensil

## Objective

Students will identify Wildland Fire Leadership Values and Principles illustrated within *Apollo 13* and discuss leadership lessons learned with group members or mentors.

## Basic Plot

The true story of the near-disastrous *Apollo 13* mission. On April 11, 1970, gung-ho astronauts Jim Lovell, Fred Haise and last-minute, less experienced replacement Jack Swigert blast-off towards the moon. But while in space, an oxygen tank explodes, putting the trio in peril: they quickly lose oxygen, run out of power, and get exposed to dangerously high amounts of carbon dioxide. Unbeknownst to them, there are more problems to come, including emotional friction when Jack is (wrongly) blamed for the explosion. Intensifying the situation is the fact that these mishaps catch the scientists and technicians at Mission Control by surprise, and they're not sure how to remedy the situation. Everyone must work together to come up with the right answer – if the astronauts are to survive... (Synopsis from Rotten Tomatoes)

## Cast Of Main Characters

Tom Hanks .....	Jim Lovell
Bill Paxton.....	Fred Haise
Kevin Bacon .....	Jack Swigert
Gary Sinise .....	Ken Mattingly
Ed Harris.....	Gene Kranz
Kathleen Quinlan .....	Marilyn Lovell

## Facilitation Options

*Apollo 13* illustrates an abundance of leadership values and principles—especially an emphasis on team cohesion. Students should have few problems identifying those that correspond to the Wildland Fire Leadership Values and Principles. The objective is not to identify every leadership principle but to promote thought and discussion. Students should be less concerned with how many principles they view within the film and more concerned with how the principles they do recognize can be used to develop themselves as a leader.

Due to the historical nature of the film, the facilitator/mentor has an option of incorporating a reading program along with the viewing of the film. Additional book and video references are provided below under “Other Resources.” Targets for Firefighting Safety: Lessons from the Challenger Case by Diane Vaughan discusses the role that organizational culture can play in affecting firefighter performance and safety.

The film can be viewed in its entirety or by clip selection, depending on facilitator intent and time schedules. Another method is to have the employee(s) view the film on his/her own and then hold the discussion session.

## Full-Film Facilitation Suggestion

When opting for the full-film method, the facilitator should determine a good breaking point near the middle of the film.

1. Review the Wildland Fire Leadership Values and Principles with students.
2. Advise students to document instances within the film that illustrate/violate the Wildland Fire Leadership Values and Principles on the handout provided.
3. Break students into small discussion groups.
4. Show students *Apollo 13*.
5. Break. (Suggestion: After loss of radio contact as the ship rounds the moon and Lovell tells the crew, “Let’s go home.”)
6. Begin the guided discussion.

## Student Reference

7. Provide a short synopsis with some “ticklers” to pay attention before beginning the rest of the film.
8. Resume the film.
9. Have students discuss their findings and how they will apply leadership lessons learned to their role in wildland fire suppression. Facilitate discussion in groups that have difficulty.
10. Wrap up the session and encourage students to apply leadership lessons learned in their personal and work lives.

## Clip Facilitation Suggestion

1. Review the Wildland Fire Leadership Value or Principle targeted for discussion. (May be given or ask students to identify the value or principle being illustrated after viewing the clip.)
2. Show the clip.
3. Facilitate discussion regarding the selected clip and corresponding value and/or principle.
4. Break students into small discussion groups.
5. Have students discuss their findings and how they will apply leadership lessons learned to their role in wildland fire suppression. Facilitate discussion in groups that may have difficulty.
6. Wrap up the session and encourage students to apply leadership lessons learned in their personal and work lives.

## Mentor Suggestion

Use either method presented above. The mentor should be available to the student to discuss lessons learned from the film as well as incorporating them to the student’s leadership self-development plan.

Encouraging individuals to keep a leadership journal is an excellent way to document leadership values and principles that are practiced.

Suggest other wildland fire leadership toolbox items that will contribute to the overall leadership development of the student.

## Other Resources

- Clemens, John K. and Wolff, Melora. *Movies to Manage By*. Chapter 2 – “The Importance of Improvisation—*Apollo 13*,” pp. 24-45. 1999.
- *Failure is Not an Option—The Untold Story of Mission Control*, History Channel.
- Kouzes, James and Posner, Barry. *The Leadership Challenge* (<http://www.theleadershipchallenge.com>). Third Edition. 2002.

## Student Reference

- Kranz, Gene. Failure is Not an Option—Mission Control from Mercury to *Apollo 13* and Beyond. 2001.
- Lovell, James A. and Kluger, Jeffery. Lost Moon—The Perilous Voyage of *Apollo 13*. 1994.
- Vaughan, Diane. Targets for Firefighting Safety: Lessons from the Challenger Case. 1996.
- Hyperlinks have been included to facilitate the use of the Wildland Fire Leadership Development Program website. Encourage students of leadership to visit the website

# DUTY

**Be proficient in your job, both technically & as a leader.**

- Take charge when in charge.
- Adhere to professional standard operating procedures.
- Develop a plan to accomplish given objectives.

**Make sound & timely decisions.**

- Maintain situation awareness in order to anticipate needed actions.
- Develop contingencies & consider consequences.
- Improvise within the commander's intent to handle a rapidly changing environment.

**Ensure that tasks are understood, supervised, accomplished.**

- Issue clear instructions.
- Observe & assess actions in progress without micro-managing.
- Use positive feedback to modify duties, tasks & assignments when appropriate.

**Develop your subordinates for the future.**

- Clearly state expectations.
- Delegate tasks that you are not required to do personally.
- Consider individual skill levels & developmental needs when assigning tasks.

**Know your subordinates and look out for their well-being.**

- Put the safety of your subordinates above all other objectives.
- Take care of your subordinate's needs.
- Resolve conflicts between individuals on the team.

**Keep your subordinates informed.**

- Provide accurate & timely briefings.
- Give the reason (intent) for assignments & tasks.
- Make yourself available to answer questions at appropriate times.

**Build the team.**

- Conduct frequent debriefings with the team to identify lessons learned.
- Recognize accomplishments & reward them appropriately.
- Apply disciplinary measures equally.

**Employ your subordinates in accordance with their capabilities.**

- Observe human behavior as well as fire behavior.
- Provide early warning to subordinates of tasks they will be responsible for.
- Consider team experience, fatigue & physical limitations when accepting assignments.

**Know yourself and seek improvement.**

- Know the strengths/weaknesses in your character & skill level.
- Ask questions of peers & supervisors.
- Actively listen to feedback from subordinates.

**Seek responsibility and accept responsibility for your actions.**

- Accept full responsibility for & correct poor team performance.
- Credit subordinates for good performance.
- Keep your superiors informed of your actions.

**Set the example.**

- Share the hazards & hardships with your subordinates.
- Don't show discouragement when facing setbacks.
- Choose the difficult right over the easy wrong.

# RESPECT

# INTEGRITY

## *APOLLO 13*

The following clips illustrate the Wildland Leadership Values and Principles. These are only guidelines and may be interpreted differently by other views; they are presented as a guide for facilitation.

### **Duty**

- Kranz holds a meeting with the flight controllers and engineers to develop the initial plan of getting the crew home—around the moon. (Develop a plan to accomplish given objectives.)
- Lovell gives Swigert the task of docking the command module to the lunar module even though all astronauts have the ability to dock. (Consider individual skill levels and development needs when assigning tasks.)
- Kranz maintains order when the problem occurs. Tells his subordinates to “work the problem.” (Be proficient in your job, both technically and as a leader.)
- Lovell gives the pilot seat to Swigert for reentry after occupying the seat by habit. (Delegate those tasks that you are not required to do personally.)
- Engineers determine that the weight distribution of the ship is incorrect since they expected moon rocks to be part of the returning cargo. The crew must quickly redistribute cargo. (Make sound and timely decisions.)

### **Respect**

- The flight physician voices his medical opinion on two instances—grounding Mattingly and telling Kranz the astronauts need sleep. (Observe human behavior as well as fire behavior. Consider team experience, fatigue and physical limitations when accepting assignments.)
- Kranz conducts many briefings with flight controllers throughout the film. (Provide accurate and timely briefings.)
- Engineers develop a carbon dioxide filter. (Take care of your subordinate’s needs.)
- Kranz listens to the plans developed by his subordinates. (Employ your subordinates in accordance with their capabilities.)
- Jack Swigert places a “NO” note on the limb jettison switch as not to jettison with the crew is in the Aquarius. (Put the safety of your subordinates above all other objectives.)

### **Integrity**

- Lovell chooses to scrub Mattingly from the mission. (Choose the difficult right over the easy wrong.)

- Lovell asks Mission Control to double-check his computations. (Ask questions of peers and superiors.)
- During the blind burn, Lovell makes an error and apologizes to Haise and Swigert. (Accept full responsibility for and correct poor team performance.)
- Jack Swigert admits that he cannot read his own writing for the reentry plan. Mattingly tells him he will walk him through it. (Know the strengths/weaknesses in your character and skill level.)
- Upon reentry, Lovell tells Mission Control and the crew, “Gentlemen, It’s been a privilege flying with you.” (Credit subordinates for good performance.)

## APOLLO 13

### **Guided Discussion – Possible Answers**

1. The *Apollo 13* mission was considered by the public to be a routine mission. How does Jim Lovell respond to the comment and reason for this being his last mission? What is the present public perception of the wildland firefighter in your community?
  - He responds in a very positive manner. “I’m in command of the best ship with the best crew that anybody would ask for.” He also informs them that no mission to space is routine. He doesn’t exhibit a complacent attitude.
  - Answers will vary.
2. Lovell says, “The astronaut is only the most visible member of a very large team. And all of us right down to the guy sweeping the floor are honored to be a part of it.” How does this statement compare to the wildland fire community?
  - Crew cohesion is a critical element of the wildland fire community and success in wildland fire suppression. Every person within the organization must work together to complete a safe and efficient mission. Without teamwork, safety may be compromised.
3. When the politician comments that his constituents question why Congress continues to fund the space program after the U.S. beat the Russians to the moon, Lovell responds with “Imagine if Christopher Columbus had come back from the new world and no one returned in his footsteps.” How can you apply this statement to the development of a wildland fire leader and the fire program in general?
  - Answers may vary. The Wildland Fire Leadership Development Program has been established by fire leaders from the past and present. Leaders at all levels should use the program to advance their knowledge, skills and abilities as a leader. Use of, and exposure to, the program will ensure that leaders continue to be molded for the continued success of the wildland fire service. The wildland fire service needs

leaders with strong vision and purpose as well as the “courage and spirit to make a significant difference.” (Kouzes and Posner—The Leadership Challenge.)

4. Marilyn Lovell questions whether NASA and the crew are rushing into the *Apollo 13* mission. Are her concerns warranted? Does this occur in the wildland fire community? What Wildland Fire Leadership Values and Principles are compromised by rushing into a mission?
  - Marilyn’s concerns are warranted. The new crew had less training in the simulators that the other crew would have had. Safety concerns may have been compromised—however, this accident may have happened to the other crew as well.
  - This event does happen within the wildland fire community.
  - Answers may vary. Consider individual skill levels and development needs when assigning tasks. Know your subordinates and look out for their well-being. Build the team. Employ your subordinates in accordance with their capabilities.
  
5. Jim Lovell uses visual aids to teach his son about his mission. What tools are available to the wildland fire leader to instruct/develop his/her crew?
  - Refer students to:
    - Leadership Toolbox.
    - Tactical Decision Games and Sand Table Exercises.
    - Wildland Fire Staff Rides.
    - Professional Reading Program
  
6. Who takes control of the situation on the ground when Lovell makes his famous statement, “Houston, we have a problem.” What is his/her first priority (which value/principle)?
  - Gene Kranz, Flight Director.
  - Putting the safety of his subordinates above all other objectives. “We’ve never lost an American in space. We’re sure as hell not going to lose one on my watch. Failure is not an option!”
  
7. The astronauts are required to perform routine procedures under extreme stress and tight schedules (powering up the *Odyssey* in 15 minutes). How is this situation similar to a shelter deployment? How can you prepare yourself and the crew for this event?
  - Wildland firefighters practice shelter deployment in less than stressful situations. Shelter deployments are not a routine procedure. The “routine” practice can never prepare a wildland firefighter for the actual deployment experience. Stress and urgency will present similar anxiety when an actual deployment occurs.

- Follow Standard Firefighting Orders, Watch Out Situations, and LCES to avoid the need for a shelter deployment. Perform regular shelter deployment simulations so the procedure becomes second nature should you need to deploy.
  - Refer to the Wildland Fire Safety Training—Annual Fresher (WFSTAR) website for additional fire shelter and safety information.
8. Why is Ken Mattingly chosen to develop the reentry strategy? Does his being pulled from the crew affect his ability to lead the team on developing a strategy? Have you experienced this in the wildland fire community? How did you handle the situation?
- Mattingly was a member of the crew until bumped because of health concerns. He knows the crew and the ship.
  - Mattingly puts his issues aside and works with his ground team to think through different procedures. His ability to bring his team to a conclusion with few conflicts was commendable.
  - Answers will vary.
9. How effective is Gene Kranz as a leader? Give reasons for your observation.
- Kranz was a highly effective leader. He ensured that everything possible was done to bring the crew home safely. He exerted his authority when needed and listened to subordinates when they contributed to the successful completion of the mission. He promoted the concept of team effort and cohesion to bring the astronauts home safely. He used leadership as a relationship and not as a position of power.
10. A NASA official states that, “This could be the worst disaster NASA has ever experienced.” Kranz responds, “With all due respect, Sir. I believe this will be our finest hour.” Which values and/or principles is Kranz exhibiting?
- Answers will vary. Duty, Respect and Integrity are all exhibited. Above all he set the example for all members of the team to follow. Kranz stated, “Failure was not an option.” He set the tone that all others followed. He allowed his subordinates, in accordance with their capabilities, to develop contingencies and while considering consequences.
11. Jack Swigert is the rookie on the mission. Crew cohesion was compromised. How is he perceived by Haise and Lovell? Identify instances in the film that support your answer. What, if anything, could have been done to maintain or build crew cohesion?
- Swigert is treated as the rookie, is blamed for failures, and is often not heard.
  - Haise blames Swigert for the explosion in the oxygen tank. Lovell, although a good leader, doesn’t always listen to Swigert. Swigert has “done the math” and determined that NASA is not telling the crew the whole story. At one point, Lovell sits in the pilot seat; he realizes his error and turns over the controls to Swigert.

- Answers will vary. Postpone the mission until Mattingly is healthy (Haise's health problem may have surfaced on the ground instead of in space.). Allow Mattingly to serve on the mission. Cancel the mission.
12. Team cohesion was critical to the success of the *Apollo 13* mission. In your opinion, how cohesive is your team? Assess your crew using the Crew Cohesion Assessment Tool developed by Mission-Centered Solutions (available in the Leadership Toolbox).
- Answers will vary.
13. Identify a situation where teamwork was used to successfully complete a task or mission in the film and in your work environment.
- Answers will vary. Developing the reentry procedure. Performing the math to double-check Lovell's computations. Building the carbon dioxide filter.
14. The astronauts use flight manuals and checklists to conduct their missions. What reference tool(s) is available to aid the wildland fire leader in decision making during routine and critical stress times?
- Incident Response Pocket Guide.
15. Although an electrical arc caused the actual explosion in the oxygen tank, what human factors may have contributed to a compromised mission?
- Answers will vary.
    - Situation Awareness: NASA does not provide information to the crew concerning the reentry plan or lack thereof. Kranz opts not to tell the crew they are coming in shallow.
    - Basic Communication Responsibilities: Lack of communication about a potential problem years before Lovell was named as commander of the mission.
    - Attitude and Stress Barriers: Public perception of and interest in the space mission. Limited time to power down the *Odyssey*. Bag is torn in space while making the carbon dioxide filter. Lovell and crew remove the bio-med sensors. Haise's blaming Swigert for the explosion.
    - Decision-making Process: Decision to use of the *Aquarius* as the command module and power source. Possibility that the makeshift carbon dioxide filter and reentry procedure would fail.
    - Teamwork Principles: Bumping the original *Apollo 13* crew. Bumping Mattingly from the mission due to potential measles. Haise's illness while in space. Compromised team cohesion.

## **APOLLO 13**

1. Document film clips illustrating the Wildland Fire Leadership Values and Principles.
2. Discuss leadership lessons learned from the film with group members or mentor.

### **Duty**

- ❖ Be proficient in your job, both technically and as a leader.
- ❖ Make sound and timely decisions.
- ❖ Ensure that tasks are understood, supervised and accomplished.
- ❖ Develop your subordinates for the future.

What scenes from the movie relate to “Duty”?

### **Respect**

- ❖ Know your subordinates and look out for their well being.
- ❖ Keep your subordinates informed.
- ❖ Build the team.
- ❖ Employ your subordinates in accordance with their capabilities.

What scenes from the movie relate to “Respect”?

### **Integrity**

- ❖ Know yourself and seek improvement.
- ❖ Seek responsibility and accept responsibility for your actions.
- ❖ Set the example.

What scenes from the movie relate to “Integrity”?

## **APOLLO 13**

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