Claim / Data Point Supported	Citation	Link
Apollo 13 launched April 11, 1970, from Kennedy Space Center with Jim Lovell, Jack Swigert, Fred Haise	NASA (Mission Overview)	https://www.nasa.gov/mission/apollo-13/
Mission goal: land at Fra Mauro, conduct lunar geology and science	Smithsonian National Air and Space Museum	https://airandspace.si.edu/explore/stories/apollo-13-mission
Apollo 12 (previous mission) hit by lightning, completed successful lunar landing	NASA Apollo 12	https://www.nasa.gov/mission/apollo-12/
Ken Mattingly replaced by Jack Swigert due to measles exposure	Lunar and Planetary Institute	https://www.lpi.usra.edu/lunar/missions/apollo/apollo_13/
Oxygen tank exploded ~322,000 km from Earth, caused by damaged wiring and heater switches	NASA Mission Details	https://www.nasa.gov/missions/apollo/apollo-13-mission-details/
"Houston, we've had a problem"—famous communication	NASA Apollo 13 Review Board Report (PDF)	https://www.nasa.gov/wp-content/uploads/static/history/afj/ap13fj/pdf/a13-review-report-app-f-g-h-19700078913.pdf
Both oxygen tanks ruptured, loss of fuel cells, electricity, water, and oxygen	Britannica	https://www.britannica.com/topic/Apollo-13-mission
Crew used Lunar Module as lifeboat, designed for 2 people for 2 days, but supported 3 for nearly 4 days	NASA Mission Operations Report (PDF)	https://history.nasa.gov/alsj/a13/A13_MissionOpReport.pdf
Mission control devised solution for incompatible lithium hydroxide canisters (CO_2 filter problem)	NASA Apollo 13 Press Kit (PDF)	https://www.nasa.gov/wp-content/uploads/static/history/alsj/a13/Apollo13_PressKit_restored.pdf
Power, water, and heat were severely rationed; cabin temperature dropped below 40°F (4°C)	NASA Apollo 13 Flight Journal	https://www.nasa.gov/history/afj/ap13fj/a13-documents.html
Free return trajectory: spacecraft looped around the Moon using lunar gravity	NASA (Mission Details)	https://www.nasa.gov/missions/apollo/apollo-13-mission-details/
Course corrections (“burns”) using the Lunar Module’s engine	NASA Apollo 13 Flight Journal	https://www.nasa.gov/history/afj/ap13fj/a13-documents.html
Apollo 13 set the record for farthest distance from Earth by a crewed spacecraft: 400,171 km	Britannica	https://www.britannica.com/topic/Apollo-13-mission
Crew suffered dehydration, lost 14 kg total; Fred Haise developed a urinary tract infection	NASA (Apollo 13 Mission Overview)	https://www.nasa.gov/mission/apollo-13/
Communication blackout during reentry lasted longer than expected, causing concern	NASA Apollo 13 Mission Review (PDF)	https://www.govinfo.gov/content/pkg/GPO-CHRG-91shrg4746/pdf/GPO-CHRG-91shrg4746.pdf
Command module’s heat shield survived reentry; safe splashdown in Pacific near Samoa	Lunar and Planetary Institute	https://www.lpi.usra.edu/lunar/missions/apollo/apollo_13/
Investigation: root cause was damaged Teflon insulation on wires in oxygen tank #2, aggravated by ground testing at 65V	NASA Mission Details	https://www.nasa.gov/missions/apollo/apollo-13-mission-details/
After Apollo 13, NASA implemented safety changes: third oxygen tank, more emergency power	NASA Apollo 13 Review Board Report (PDF)	https://www.nasa.gov/wp-content/uploads/static/history/afj/ap13fj/pdf/a13-review-report-app-f-g-h-19700078913.pdf
Apollo 14, 15, 16, and 17 were all successful lunar missions after Apollo 13	NASA: Apollo Program	https://www.nasa.gov/specials/apollo50th/missions.html
Apollo 17 (last mission, December 1972) discovered orange soil (volcanic glass beads), revealing volcanic history of the Moon	NASA Solar System Exploration	https://solarsystem.nasa.gov/missions/apollo-17/in-depth/
Apollo 13 as a “successful failure,” public/media impact, and legacy	Apollo11Space	https://apollo11space.com/the-most-authoritative-sources-on-the-apollo-program/
Apollo 13 technical documents, checklists, and flight plan	NASA Apollo 13 Flight Journal	https://www.nasa.gov/history/afj/ap13fj/a13-documents.html
Official NASA mission reports and press kit (detailed technical, crew, and recovery info)	Barnes & Noble (NASA eBook)	https://www.barnesandnoble.com/w/apollo-and-americas-moon-landing-program-progressive-management/1140557497
Apollo 13 case study, technical and engineering lessons	NASA Technical Reports Server (PDF)	https://ntrs.nasa.gov/api/citations/20080042304/downloads/20080042304.pdf