

Committee: NASA: Apollo 13

Topic: The Apollo 13 Mission Crisis

Position: John Aaron, NASA Flight Controller

School: Maple Leaf International School.

With the continued success of the Apollo program including the relatively recent completion of the Apollo 12 mission, it is imperative that NASA maintains our current standard of excellence. The Apollo program, unlike many other previous space programs has had the luxury of not having to deal with a major incident or accident that jeopardises the continuation of said program with, the regrettable exception of the Apollo 1 disaster. The Apollo program has done many great things; from reinforcing the superiority of American technology and dedication over the Soviets, to providing a beacon of patriotism that will serve as a reminder of American determination, hard work and sacrifice for generations to come. However, while we recognize the public impact that missions such as Apollo 11 had, it is important to note that with recent missions, public interest has slowly declined as-unfortunately- missions to the moon seem to have become the American norm. I am very proud to say that despite the public's waning interest in the Apollo program, our mission team remains obsessively dedicated to the continued success of every Apollo launch, popular or not.

That being said, approximately six minutes ago the Apollo 13 mission reported back with severe instrument failure. The Apollo crew just reported that the oxygen gauge for tank 2 is now showing zero, after hearing a loud bang coming from the side of the spacecraft. The ground team has yet to confirm how serious the damage is and the danger it poses to the original mission. At this time, I have the utmost confidence in the ability of both the ground crew and the astronauts to handle the situation to the best of their ability.

Based on the information that has been relayed to me, I have determined that the readings the ground crew are receiving were not due to an instrumental malfunction. The extent of the damage to the spacecraft has not yet been determined. If indeed the contents of the second oxygen tank have been released into space, then the damage to the spacecraft will be assessed and if serious, the abort plans for the mission will be executed in order to return the Apollo spacecraft and her crew safe and sound. Assuming the service module's main engine was not damaged in a critical manner, a direct abort burn would be carried out in order to return the Apollo 13 crew home. The Apollo module would perform an extended burn of the service module's main engine to swing the Apollo craft around the front of the moon without orbiting. This would require a significant amount of fuel to alter the spacecraft velocity, but would return the craft home faster than the other abort scenarios. If, however, the service module's main engine is damaged in some way, then other options would have to be examined such as a circumlunar abort burn using the lunar descent systems to perform a more fuel efficient but time

consuming abort manoeuvre. This would be done by performing precise course correction burns that would swing the spacecraft around the moon and back to earth, saving fuel at the expense of time. Naturally, we are awaiting further reports on the situation of Apollo 13 before we can attempt to make an informed decision about the situation and devise a solution. As a flight controller of this mission, I have just been assigned control of the Apollo 13's power reserves. Throughout this mission, I will now be responsible for managing the (currently) unknown amount of power reserves left on board the spacecraft in order to keep all critical systems online. Mission control has also just given me additional authority over all other engineers particularly when the power supply of the spacecraft is affected by their potential ideas. With this newly granted authority and with the help of the talented people working with me, I hope to see the Apollo 13 crew soon.

*Yours Truly,
John Aaron
NASA Flight Controller*