## **Apollo 8 – Merry Christmas from the Moon**

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Many say Apollo 8 redeemed 1968.

It was Christmas Eve of 1968, at the end of a pretty momentous year: the massive military offensive during the Vietnamese holiday of Tet had inflicted heavy losses on the US Army and its allies with thousands of deaths; in the USA Martin Luther King and Robert Kennedy were assassinated, violent tumults between students and police had bloodied the streets of Chicago during the Democratic National Convention; the "Prague Spring" had been brutally crushed by Soviets tanks that had invaded Czechoslovakia; the student protest had broken out all over the world.



NASA was struggling to make up for lost time, after the tragic

cabin fire that killed the 3-man crew of Apollo 1 on the launchpad in Feb 1967, and to achieve the goal established by President John F. Kennedy to land a man on the moon and return him safely to Earth by the end of decade.

They realized that the planned test of the lunar module in Earth orbit would not have been possible, since the implementation of the lunar module encountered serious problems and had fallen behind schedule. The Lunar Module would not be ready until March 1969. Instead of postponing the mission, it was decided that the Apollo 8 – the first manned Apollo Saturn V flight – would fly only the CSM and would be sent to the Moon orbit. The decision had a double meaning: it performed the test of insertion into the lunar orbit, that sooner or later had to be made anyway, and achieved the sending of a human crew around the Moon beating the Soviets. According to the intelligence the Russians had a plan to loop cosmonauts around the Moon and were trying to get there before the Americans. Unmanned Soviet Zond space missions were clearly tests of their circumlunar spacecraft and the Reds were ready to launch a manned lunar fly-by before the end of the year.

Those were moments of great tension. The curtain of secrecy was, as usual, impenetrable. Putting together the news they had, the rumours circulating, and their experiences on the behaviour of the Soviets, at NASA they feared the worst. They were at the final stages of a race that had become increasingly spasmodic. The cover of the *Time* of December 6, 1968 – featuring an astronaut and a cosmonaut sprinting towards the Moon – significantly represents the atmosphere that was breathed at NASA and the mood of the Western world. A few weeks later, *Newsweek* magazine featured a cover story about the Apollo 8 mission titled "Apollo Triumph", to be published in the first issue of January 1969,



On the left: cover of TIME Dec. 6, 1968. Center: cover of NEWSWEEK Jan 6, 1969. On the Right: printing plate for the the alternate cover of Jan 6, 1969

But the editors had also created an alternative cover with the words "Apollo Tragedy" that, fortunately, was never used. What the two major news magazines reflected was both the belief that the United States and Russia were in a neck-to-neck competition, and that the Apollo 8 mission was highly risky and could end tragically.

Historians disagree whether the agency truly feared being beaten to the moon that year or was just a gimmick to get back on schedule for testing both the Saturn V and the Command and Service Modules. In either case it was a venture full of risks and unknowns, but if it had succeeded it would have represented a real milestone: the Apollo 8 would have been the first manned spacecraft to leave Earth orbit, the first to venture for many days in deep space, the first to return to our planet at a speed of about 40,000 km / h, but above all the first to orbit the Moon, and the Apollo 8 astronauts would be the first humans to directly observe with their own eyes the far side of the Moon.

There was a great expectation. By now these missions were followed by the whole world on television and - as live pictures broadcast from the Moon would happen on Christmas Eve - a record audience was expected. In fact it would be then described as the biggest broadcast audience in history.

NASA therefore directed the astronauts to "say something appropriate".



While the three astronauts Frank Borman, Bill Anders and Jim Lovell, were struggling to find "something appropriate" for the speech, someone suggested "why don't just read from the book of Genesis?"

The three liked the idea. and that is what they did, with the words typed on a fireproof page of the flight plan.

After all, the Old Testament was recognized not only by Christians, but also by other important religions such as Judaism and Islamism.

The emotional impact on the three astronauts on that Christmas Eve of 1968 was enormous. After the privilege of seeing the moon's far face, they saw the rising of the Earth. The sense of wonder and awe was immense. "It was – Borman later recalled – the most beautiful, heart-catching sight of my life, one that sent a torrent of nostalgia, of sheer homesickness, surging through me. It was the only thing in space that had any colour to it. Everything else was either black or white. But not the Earth.

Although it was not scheduled by the protocol (every photographic exposure had been determined in advance by NASA), the astronauts did not resist the temptation and began to photograph the Earth: many shots, including the most famous one of our blue-coloured planet emerging from behind the lunar surface, which became an icon of the Sixties known as the "Earthrise". (At that time digital photography didn't exist and the pictures could be watched at only after the exposed films had been brought back to Earth, developed and printed).

Bill Anders, author of the famous shot, recalls: "One of my assignments was to photograph the lunar surface to facilitate



the evaluation of potential landing sites. A startling image captivated the three of us. Earth, 238,900 miles away, ascended above the barren lunar surface. Compelled by that vision. I deviated from the rigid NASA flight plan. – We set out to explore the moon, and instead we discovered the Earth"

Opening the transmission, the Commander, Frank Borman, introduced his fellow spacefarers. Each of them expressed in his own words the impressions that the lunar surface had given them. Then Anders said, his emotions unmasked: "*For all the people on Earth, the crew of Apollo 8 has a message we would like to send you.*". Thus began one of the most touching moments of the entire Apollo Programme, as Anders continued:

"In the beginning God created the Heaven and the Earth.

And the Earth was without form, and void; and darkness was upon the face of the deep.

And the Spirit of God moved upon the face of the waters. And God said, Let there be light: and there was light.

And God saw the light, that it was good: and God divided the light from the darkness." Jim Lovell:

"And God called the light Day, and the darkness he called Night. And the evening and the morning were the first day.

And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters.

And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament: and it was so.



And God called the firmament Heaven. And the evening and the morning were the second day." Frank Borman:

"And God said, Let the waters under the heavens be gathered together unto one place, and let the dry land appear: and it was so.

And God called the dry land Earth; and the gathering together of the waters called he Seas: and God saw that it was good."

Borman stopped for a short pause, and speaking in a more personal tone of voice, added: "And from the crew of Apollo 8, we close with good night, good luck, a Merry Christmas, and God bless all of you—all of you on the good Earth.".

The live broadcast attracted almost the biggest television audience of that time around the world: it is estimated that the live broadcast was followed by over one billion viewers in 64 countries and that that same day was retransmitted in other 30 countries.



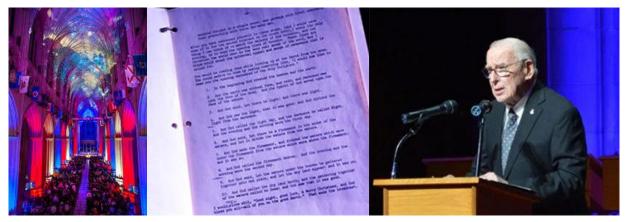
But NASA also had to face a lawsuit that dragged on for years, brought by the activist Madalyn Murray O'Hair, Founder of the American atheistic movement, famous for the case he had already presented at the Supreme Court that in 1963 had prohibited reading of the Bible in public schools. O'Hair sued NASA claiming that reading the Bible in public was unconstitutional.

The case was filed by the Supreme Court in 1970, but since then NASA has been self-censured on matters of religion.

The verses of Genesis broadcast from the Moon left an important track in history, so that fifty years later, on 11 December 2018, in the context of solemn ceremonies commemorating the fiftieth anniversary of the Apollo programme, the Smithsonian National Air & Space Museum, in cooperation with NASA held a commemoration of Apollo 8 "*The Spirit of Apollo*" at the National Cathedral in Washington.

"Some of our bravest pilots and sailors, riding atop repurposed weapons of war, delivered a message of peace for all humankind. That was the spirit of Apollo." Said Ellen Stofan, the Director of the National Air and Space Museum.

The Most Reverend Michael B. Curry, Presiding Bishop and Primate of the Episcopal Church honoured "the spirit of the Apollo that, wishing to project us towards the future of mankind, has turned to the beginning".



On the left: interior of the National Cathedral in Washington, DC. Center: The flight manual from which the Apollo 8 astronauts read the Genesis verses, on display at the Washington National Cathedral. On the right: Jim Lovell speaks during an event

In a choreographic performance, with movies and live-playing orchestra, it was recalled "that moment of unity and spiritual meaning of the exploration embodied by the first flight to the moon." The bishop read again the first verses of Genesis, until God said: "*Let there be Light*!" Then quoting the poetic version of the nineteenth-century preacher James Weldon Johnson, he continued: "And God stepped out on space and said, 'I'm lonely: I'll make me a world'". And he quoted John 3:16 "God has so loved the world that Christmas happened."

These words recalled the spiritual atmosphere that had been created for the spacecraft that circled the moon on Christmas Day and that was transmitted to the whole world with the reading of Genesis.

The ceremony ended with the wish of Merry Christmas to all.

Rightly, there were those who raised objections against the poor theological rigour of Bishop Curry, dragged by the exuberant enthusiasm characteristic of some black American church.

However, the exceptionality of this memorable commemoration with religious features in an event organized under the aegis of NASA, which has always proclaimed itself strictly secular, has not been unnoticed.

Certainly the success of Apollo 8 was considered by many an even more significant historic event than the actual moon landing of Apollo 11, 7 months later, in July 1969.



The six-day mission was a roaring success with a profoundly positive message. At the end of a dramatic year it was perceived as a very positive note which greatly lifted the spirits of a nation – and of the world – in turmoil.

The reading of the first verse of the Bible in space was such an "iconic" event that in 1969

the United States Postal Service issued a commemorative stamp of the Apollo 8 mission in which was featured the photo of the Earthrise, and carried the first words of the now familiar biblical verse: "In the beginning God..."

