

# APOLLO 11

## 50TH ANNIVERSARY

# 1969-2019

**9:32 a.m. (EDT)** Apollo 11 blasts off from Launch Pad 39A at Cape Kennedy, Florida – on schedule

**12:22 p.m.** Apollo 11 is boosted out of orbit midway into its second trip around the Earth and onto its lunar trajectory at an initial speed of 24,200 miles per hour

**12:52 p.m.** Spacecraft was maneuvered to separate the Service and Command Modules from the spent second rocket stage, turning it around to dock with the Lunar Module, extracting it from the spent stage. They head to the Moon in this re-combined configuration

**2:54 p.m.** The spacecraft is reported 22,000 nautical miles from Earth and traveling at 12,914 feet per second (8,805 mph)

**8:52 p.m.** Mission Control at Houston, Texas, say good night to the crew as they prepare for their first evening in space

**10:59 p.m.** Due to the pull of Earth's gravity, the spacecraft slows to 7,279 feet per second at distance of 63,880 nautical miles from Earth

**8:48 a.m.** Mission Control gives Apollo crew a briefing of the morning news

**12:17 p.m.** Midcourse correction made with a three-second burn, sharpening the course of the spacecraft and testing the engine that will get them into and out of lunar orbit

**7:31 p.m.** Astronauts begin first scheduled color telecast from space that lasted 36 minutes, showing a view of the Earth from about 128,000 nautical miles and an inside view of the command module

**9:42 p.m.** Mission control bids the crew good night

**9:41 a.m.** Mission Control allows crew to sleep an hour late. After breakfast they begin housekeeping chores, such as charging batteries, dumping waste water, and checking fuel and oxygen reserves

**2:57 p.m.** Astronauts are given report on day's news

**4:40 p.m.** One of the clearest television transmissions ever sent from space begins at 175,000 nautical miles from Earth and 48,000 nautical miles from the Moon. During this they open the hatch to the Lunar Module and Armstrong squeezes through the 30-inch wide tunnel to inspect it, followed by Aldrin

**10:00 p.m.** Mission Control bids the crew goodnight

**11:12 p.m.** Velocity has slowed to 2,990 feet per second (2,038 mph) just before entering the Moon's sphere of influence at a point 33,823 nautical miles from it

**6:58 a.m.** Astronauts call Mission Control to inquire about scheduled course correction but are advised to go back to sleep as correction is not needed

**8:32 a.m.** Mission Control signals crew to wake up, start breakfast, and begin housekeeping chores

**10:01 a.m.** Astronauts are given the day's news and are told of the worldwide interest in their mission

**12:58 p.m.** Crew informed by Mission Control: "We're 23 minutes away from the LOI (Lunar Orbit Insertion) burn....", seconds later... "You are go for LOI"

**1:13 p.m.** Spacecraft passes completely behind Moon and out of radio contact for first time

**1:28 p.m.** Spacecraft's main rocket engine is fired for about six minutes to slow vehicle enough to be captured by lunar gravity, still on far side of the Moon

**3:56 p.m.** A 35 min telecast of the Moon's surface begins  
The spacecraft is orbiting the Moon every two hours

**9:27 a.m.** Aldrin powers up systems in the lunar module, joined later by Armstrong

**1:46 p.m.** Lunar Module is separated from command module, in which Collins continues to orbit the Moon

**3:08 p.m.** Flying feet first and face down, Armstrong and Aldrin fire the landing craft's descent engine for first time

**4:05 p.m.** Armstrong throttles up the engine to slow landing module before dropping to the lunar surface. Maneuvering to landing was difficult and risky. Armstrong's heartbeat rises from 77 to 156. They land 4 miles from target point.

**4:18 p.m.** Armstrong radios Mission Control: "The Eagle has landed"

**10:56 p.m.** Armstrong steps off the ladder onto the Moon, "That's one small step for a man, one giant leap for mankind"

**11:41 p.m.** United States flag is set up on Moon's surface

**11:48 p.m.** Armstrong and Aldrin receive a phone call from President Nixon

**12:54 a.m.-1:09 a.m.** Aldrin and Armstrong re-enter Lunar Module

**4:25 a.m.** Astronauts attempt to sleep after debriefing

**1:54 p.m.** Ascent engine is started and Lunar Module begins rising and reaches vertical speed of 80 feet per second at 1,000 feet altitude

**5:35 p.m.** Eagle (Lunar Module) redocks with Columbia while passing over the far side of the Moon

**7:42 p.m.** Landing craft is jettisoned; months later its orbit decays and it impacts the lunar surface

**12:56 a.m.** While on back side of Moon the transearth injection burn begins. Spacecraft escapes Moon at 5,329 feet per second (3,633 mph) at an altitude of 60 nautical miles

**1:39 p.m.** Spacecraft passes the point in space, 33,800 nautical miles from Moon and 174,000 nautical miles from Earth, where the Earth's gravity takes over and begins drawing them homeward

**9:08 p.m.** Eighteen minute live television transmission begins

**12:20 p.m.** Crew wakes and begins systems checks and conversation with Mission Control

**3:56 p.m.** Spacecraft passes midway point of journey home, 101,000 nautical miles from splashdown

**7:03 p.m.** Final color television transmission begins

**12:21 p.m.** Command and service modules separate

**12:35 p.m.** Command module re-enters Earth's atmosphere

**12:51 p.m.** Spacecraft splashes down 825 nautical miles southwest of Honolulu and 13 nautical miles from the recovery ship, U.S.S. Hornet

**1:20 p.m.** Hatch of command module is opened

**1:28 p.m.** Astronauts emerge in isolation suits and are disinfected of potential Moon "germs"

**1:57 p.m.** Astronauts arrive by helicopter on flight deck of U.S.S. Hornet where they are transported to a quarantine trailer to take them to Lunar Receiving Laboratory at Houston on July 27th

**3:00 p.m.** President Nixon welcomes them home through a window of their quarantine trailer and invites them to the White House

**3:55 p.m.** Command module arrives on board the U.S.S. Hornet after traveling 952,700 nautical miles in 9 days

DAY 1

WEDNESDAY  
JULY 16, 1969

DAY 2

THURSDAY  
JULY 17, 1969

DAY 3

FRIDAY  
JULY 18TH, 1969

DAY 4

SATURDAY  
JULY 19, 1969

DAY 5

SUNDAY  
JULY 20, 1969

DAY 6

MONDAY  
JULY 21, 1969

DAY 7

TUESDAY  
JULY 22, 1969

DAY 8

WEDNESDAY  
JULY 23, 1969

DAY 9

THURSDAY  
JULY 24, 1969

