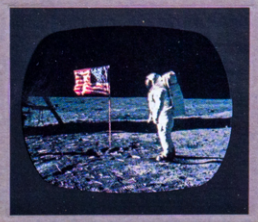
1970

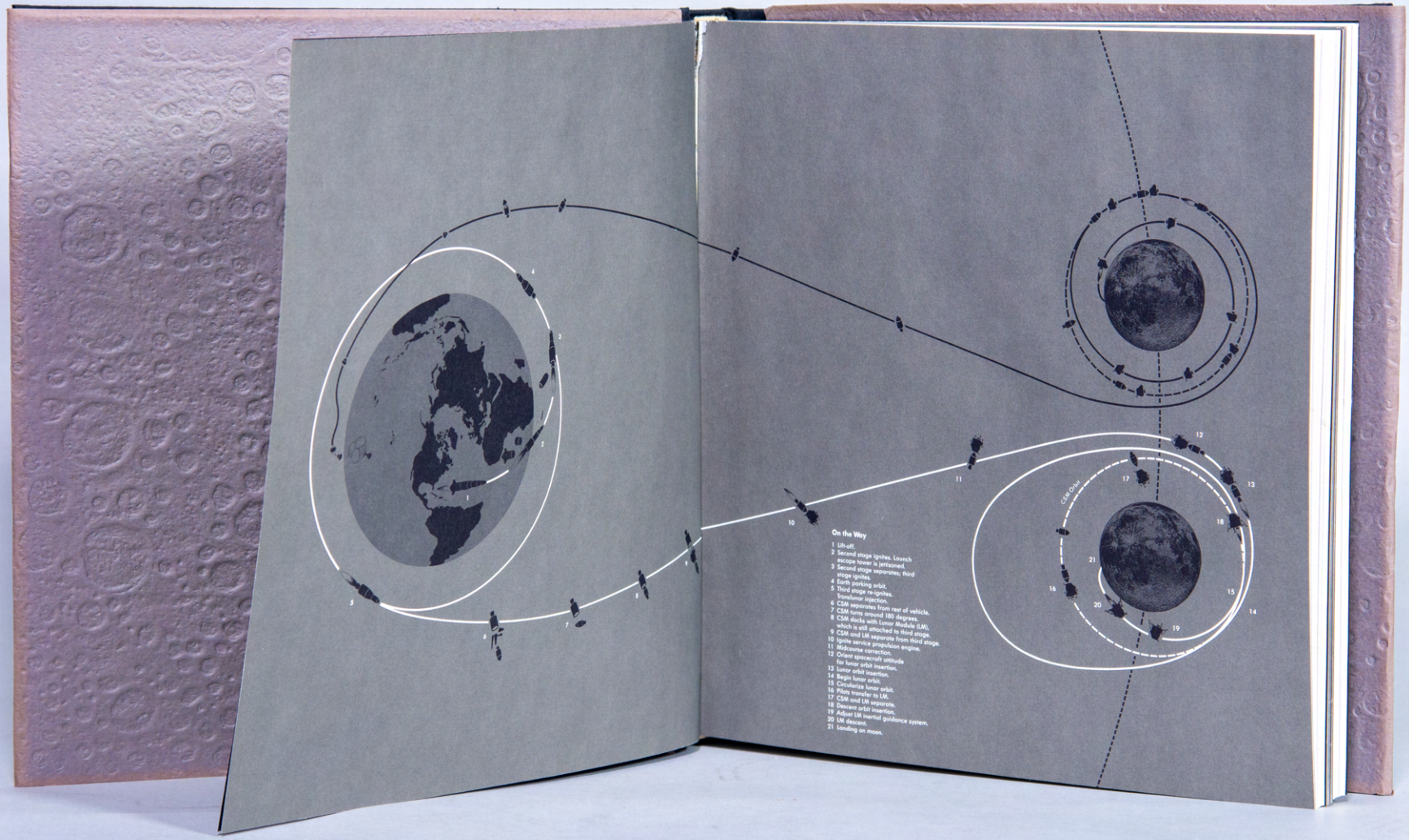
10:56:20 PM EDT 7/20/69 (Man on the Moon)

Lou Dorfsman

CBS Corporate Entertainment and News Divisions



10:56:20PM 7/20/69 CBS NEWS


On the Way
1 Lift-off.
2 Second stage ignites. Launch escape tower is jettisoned.
3 Second stage separates; third stage ignites.
4 Earth parking orbit.
5 Third stage re-ignites. Translunar injection.
6 CSM separates from rest of vehicle.
7 CSM turns around 180 degrees.
8 CSM docks with Lunar Module (LM), which is still attached to third stage.
9 CSM and LM separate from third stage.
10 Ignite service propulsion engine.
11 Midcourse correction.
12 Orient spacecraft attitude for lunar orbit insertion.
13 Lunar orbit insertion.
14 Begin lunar orbit.
15 Circularize lunar orbit.
16 Pilots transfer to LM.
17 CSM and LM separate.
18 Descent orbit insertion.
19 Adjust LM inertial guidance system.
20 LM descent.
21 Landing on moon.
CSM Orbit

10:56:20PM EDT
7/20/69

The historic conquest of the moon as reported to the American people by CBS News over the CBS Television Network.

Foreword

At 10:56:20 p.m. EDT, July 20, 1969, man first stepped on the moon. It took place 238,000 miles out in space, yet it was shared by hundreds of millions of people on earth. The step on the moon was an awesome achievement; so was its reporting on television because it emphasized television's extraordinary ability to unify a disparate world through communicating with so many people, in so many places, and thus providing them with a common—and an extraordinarily satisfying—experience.

Like all experiences recorded by television, this one was ephemeral. It flashed on the screen and was gone. This book, which attempts to recapture some of the reality of this unique experience, also permits all of us, in some small measure, to recall that experience in more permanent form. In this sometimes discouraging and frustrating world, it is worth preserving a moment of pride in the ability of man to do what he sets his mind to do. It not only serves as a mark of what man has done, but what, with similar determination and cooperative effort, he can do in the future to achieve other goals, closer to home. And so, this book not only seeks to crystallize the images that CBS News brought to the screen, but recounts the story of the intricate logistics and inventive techniques of the men on camera and behind the camera who made this reality possible.

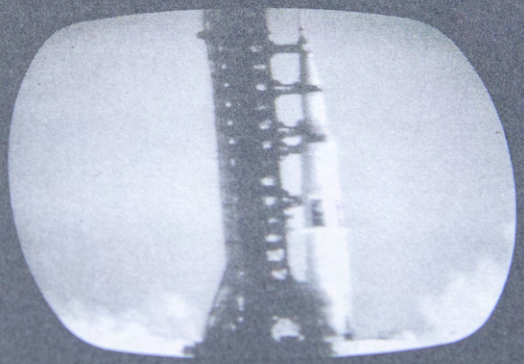
For my colleagues at CBS News, and for myself, covering "Man on the Moon: The Epic Journey of Apollo 11" ranks as the single most satisfying effort in our collective experience as journalists. All too often we are forced to report man's shortcomings. In this instance, from the moment of blast-off to the moment of splashdown we were continually conscious of being involved in one of the great triumphs of the human spirit.

This consciousness involved our total energies and efforts. It en-

abled us to meet some of the most formidable challenges ever faced by electronic journalism. Because it was one of man's greatest achievements, it was one of television's great achievements. And just as Apollo 11 could not have been achieved without the extraordinary genius and dedication of hundreds of thousands of Americans who stood behind the three astronauts, so the CBS News broadcast could not have been achieved without the magnificent dedication and excellence of the hundreds of people who make up CBS News.

RICHARD S. SALANT
President, CBS News

The Launching
July 16



Wednesday, July 16, 1969

Mission Control: **We are still go with Apollo 11…30 seconds and counting. Astronauts reported "Feels good." T-25 seconds. 20 seconds and counting. T-15 seconds, guidance is internal, 12, 11, 10, 9, ignition sequence starts, 6, 5, 4, 3, 2, 1, zero, all engines running, lift-off. We have a lift-off, 32 minutes past the hour. Lift-off on Apollo 11. Tower cleared.**

It is 9:32 a.m. EDT on Wednesday, July 16, 1969. Millions of Americans and countless millions around the world have waited for this moment. Astronauts Neil Armstrong, Edwin "Buzz" Aldrin and Michael Collins are riding a huge Saturn V rocket, lifted by 7,500,000 pounds of thrust, on their way to a date with history.

At lift-off, the CBS News studio at Cape Kennedy, which only five minutes before had been a scene of great activity, was virtually empty. Only Correspondent Walter Cronkite, former astronaut Wally Schirra, producer Joan Richman, stage manager David Fox, the cameramen and two technicians were in the studio as the countdown entered its final minutes. Everyone who could had gone outdoors to watch the launch.

At the precise second of ignition all attention turned to the launch pad, and everyone moved to the window for a better view of the drama

the moon were delayed by a good old-fashioned traffic jam. The usual 12 minutes from when they left the building to the time when the first astronaut entered the Command Module stretched to 27 minutes.

Eric Sevareid, who was seeing his first manned shot, described those early hours and his reactions in a talk with Cronkite shortly before lift-off.

Cronkite: *What's the view out there from the outside, Eric?*

Sevareid: *Walter, the heat is beginning to rise. Some slight haze gathering in the atmosphere. You don't quite see the rocket out there as distinctly as we saw it shortly after dawn. The heat is like a silk cloth you put across your face. Before dawn the rocket out there was all lit up, pure white. It looked like the North Pole would look if it was really a pole, with lights of the aurora borealis going out in every direction in the black skies around.*

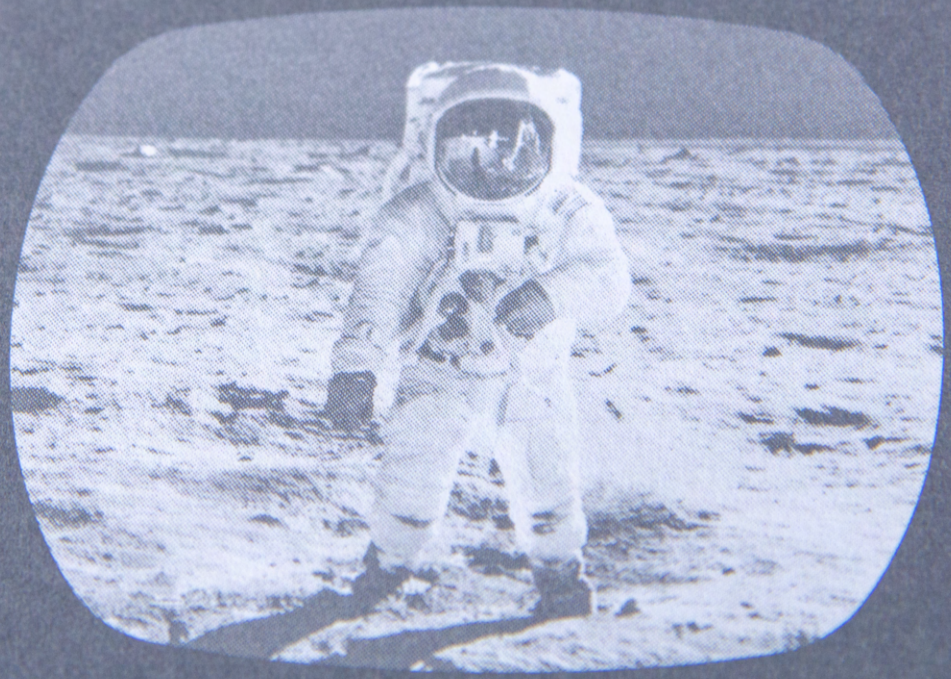
The whole country around here is a kind of vast launching pad. This is big sky country. It's very flat. It's right-angle country. And the crowd is always knots of people. There's not a carnival atmosphere here really. You've got the snack shops and all the rest, all the trailers, but there is a quiet atmosphere and when the vans carrying the astronauts themselves went by on this roadway just now, there was a kind of a hush among people. Those things move very slowly as though

near the terminator, the point where the astron
light into darkness, was clearly visible.

As they crossed the terminator, they trained
back through the window for a last look before
astronauts had just passed the 24-hour point in
lunar landing, and in an hour would fire the ser
engine to lower them into a circular parking o
moon. Armstrong and Aldrin would go back i
its systems; then the astronauts would rest.

Tomorrow was the big day.

Man on the Moon
July 20,21



The voice is that of CBS News Correspondent Charles Kuralt. It is 11:00 a.m. EDT, Sunday, July 20:

In the beginning God created the heaven and the earth. And the earth was without form and void. And darkness was on the face of the deep. Some five billion years ago, whirling and condensing in that darkness, was a cloud of inter-stellar hydrogen, four hundred degrees below zero, eight million miles from end to end. This was our solar system, waiting to be born.

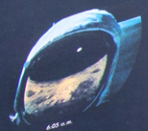
A hundred million years passed. And God said "Let there be light." And there was light at the center of that whirling cloud as a protostar began to form, its gravitational pull attracting larger and larger mass —rotating faster and faster. And in that condensation and heat the sun was born—in fire out of cold—ever smaller and ever more brilliant, ringed with those satellites that were to be its planets. Two protoplanets —the earth and the moon—now separate gaseous eddies mutually trapped in their gravitational pull, moving in tandem orbit around the sun and growing more dense. Through space and time they

10:56:20
A Pictorial Essay

The Launching July 16


6:08
Schirra and Cronkite at Cape Kennedy


Breakfast (Recorded)

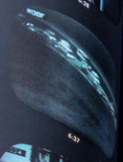

6:03 a.m.


6:27

6:06

6:07


6:29


6:37

6:48


307
6:49


8:59
Severeid and Cronkite


9:04
Heywood Hale Broun on the beach


9:10

9:31
30 seconds and counting

9:31:58

9:31:59


9:32
"Lift-off"

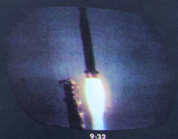

9:32
Johnson and Agnew


9:32
"We have a lift-off."


9:32


9:32


9:32


9:32
"Tower cleared"


9:32
9:32
9:32
9:32
9:32
9:32
9:32
9:32
9:32
"You are go for staging"
9:34
"Inboard cutoff"
9:34
"Staging and ignition"
9:34
9:34
9:34
9:34
9:34
9:34
On the bench
RECORDED
9:34
9:36
9:37


11:39
11:49
Arthur C. Clarke and Cronkite
11:49
11:59
11:59
12:00
11:30
12:03 p.m.
Bruce Morton at Houston
11:31
Replica of plaque to be left on the moon
12:20
12:24
12:25
Cronkite reminisces about old days at the Cape
12:33
Schirra describes lapel pin
12:49
12:50
Command Module separates...
CBS NEWS
SIMULATION
12:52
12:52
12:53
CBS NEWS
SIMULATION
12:53
12:57
CBS NEWS
SIMULATION
12:59
...docks with Lunar Module
and pulls away from third stage

On the Way

Live Transmission July 17


7:33 p.m.


7:34

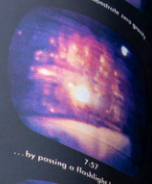

7:39

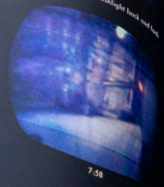

7:46
Michael Collins


7:47


7:47


7:56
The astronauts demonstrate zero gravity


7:57
...by passing a flashlight back and forth


7:58


7:58


7:59


8:00
The Apollo 11 patch


5:57
Aldrin attaches camera in LM window


6:04
Aldrin describes his helmet

Live Transmission July 18

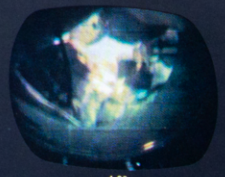

5:55 p.m.
Aldrin in Eagle


5:56


5:58


6:00
Control panel


6:02
Control panel


6:03
Aldrin in LM as seen from Command Module


6:04


6:04

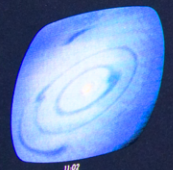
The white dot that appears in the following pictures is a hole that was burned in the imaging tube of the Westinghouse camera that the astronauts took aboard Apollo 11. The hole was burned in the tube when the camera was focused on an extremely bright object.

Man on the Moon July 20, 21

Using an animated film, Charles Eames narrates the historic broadcast with a poetic description of the creation of the moon and its effect on life on earth.

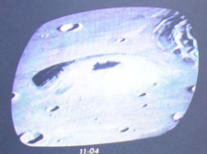

11:00 a.m.

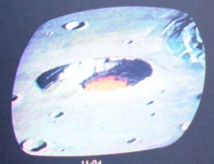

11:02


11:02


11:02


11:03

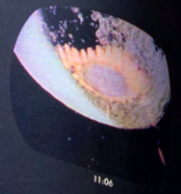

11:04


11:04


11:04


11:05


11:05

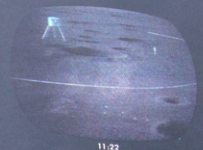

11:06


11:07
Cronkite in places in New York


11:15
Bruce Morton in Houston

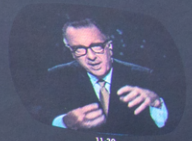

11:17
Marya McLaughlin in Houston


11:21
George Herman at Flagstaff


11:22
John Hart at Cinder Lake

11:23
Bill Plante in New York

11:29


11:30


11:30


11:30

11:45
Dr. Goldmark explains the CBS color...

11:54
At the White House

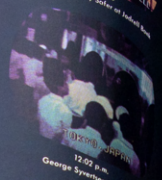
11:47
...field sequential television system...

11:57

11:47
...used aboard Apollo 11

11:51
Newell Trask, Arthur C. Clarke, Schirra and Harry Reasoner

11:54
...with Marley Safer at Tranquility Base



12:02 p.m.
George Syvertsen in Tokyo

12:15
Astronaut Tom Stafford with Bruce Hamm

12:41
Bill Haskell at Mystic Seaport, Conn.

12:58
Don Wayne in Dayton

1:03
Barry Serafin in St. Louis

1:17
Kurt Vonnegut, Jr. joins Clarke and Reasoner

1:30
Mike Wallace

1:32
...in Paris

1:36
Marvin Kalb in Bucharest

1:38
Gerald Miller at Rome's Spanish Steps

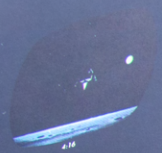
1:39
...reporting from Rome

1:46
The undocking

1:47
"The Eagle has wings."

1:57

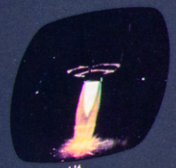
2:41
Ira Magaziner and Gloria Steinem dissent



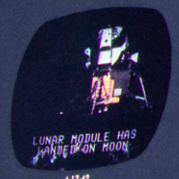
4:16

4:16

4:16



4:16



4:17:42
"Man on the moon!"

4:18

4:18

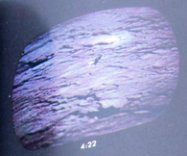
4:18
"I've been saying them all under my breath."

4:19

4:19

4:19
"Whew, boy..."

4:19



4:22

4:37

4:29

4:57
Mr. and Mrs. Stephen Armstrong

4:57

4:57

4:57

5:10

5:12
Joseph Benti at Kennedy Airport

5:18
Braun at Disneyland

5:42
...with George Herman at Flagstaff

5:50
...at Mission Control


10:11
10:50
10:54
10:55
10:49
10:56:20
"That's one small step for a man…


10:56
...one giant leap for mankind."


11:39
11:43
11:40
11:43
11:46
11:46

Homeward Bound

Live Transmission July 22

It was 12:56 AM, and Neil Armstrong had fired the Command Service Module engine, to propel the spacecraft out of lunar orbit. Apollo 11 was on its way back to earth.

Later that day the astronauts gave workings of a instrument of space. Buzz Aldrin made it how spread sandwich and then applied the principle of the gymnasts with the empty tin.

12:56 a.m.


9:02 p.m.
Mission Control


9:17
Aldrin and a piece of bread


9:18


9:18

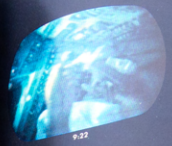

9:20
The Astronaut


9:20


9:20


9:20


9:22
Collins demonstrates, with a spoonful of water, the effect of weightlessness.


9:22


7:12
Buzz Aldrin


7:14

Live Transmission July 23


7:12


7:17


7:04 p.m.


7:14
Neil Armstrong


7:18


7:08
Mike Collins


7:14

forward...altitude-velocity lights...3½ down...220 feet...13 forward 19 forward...altitude-velocity lights...3½ down...220 feet...13 forward ...11 forward, coming down nicely...200 feet, 4½ down...5½ down... 160, 6½ down...5½ down, 9 forward...5 percent...quantity light 75 feet. Things still looking good, down a half...6 forward...lights on...down 2½...forward...40 feet, down 2½, kicking up some dust...30 feet, 2½ down...faint shadow...4 forward...4 forward, drifting to the right a little...6...drifting right...

Cronkite: *Boy, what a day.*

Capcom: **30 seconds.**

Eagle: **Contact light.O.K.engine stopped...descent engine command override off...**

Schirra: *We're home!*

Cronkite: *Man on the moon!*

Eagle: **Houston, Tranquility Base here. The Eagle has landed!**

Capcom: **Roger, Tranquility. We copy you on the ground. You've got a bunch of guys about to turn blue. We're breathing again. Thanks a lot.**

Tranquility: **Thank you.**

Homeward Bound

22 Lift-off from moon.
23 LM ascent.
24 LM heads into orbit nearly matching that of CSM.
25 LM changes plane of its orbit.
26 LM and CSM fly in tandem.
27 Final rendezvous maneuver begins.
28 Rendezvous.
29 CSM and LM dock.
30 Transfer crew and equipment from LM to CSM.
31 CSM and LM separate; LM is jettisoned.
32 Transearth injection.
33 Midcourse correction.
34 CM and SM separate.
35 Orient CM for re-entry.
36 Re-enter earth's atmosphere.
37 Communications blackout period.
38 Jettison forward heat shield and deploy drogue chute.
39 Deploy main chutes.
40 Splashdown.