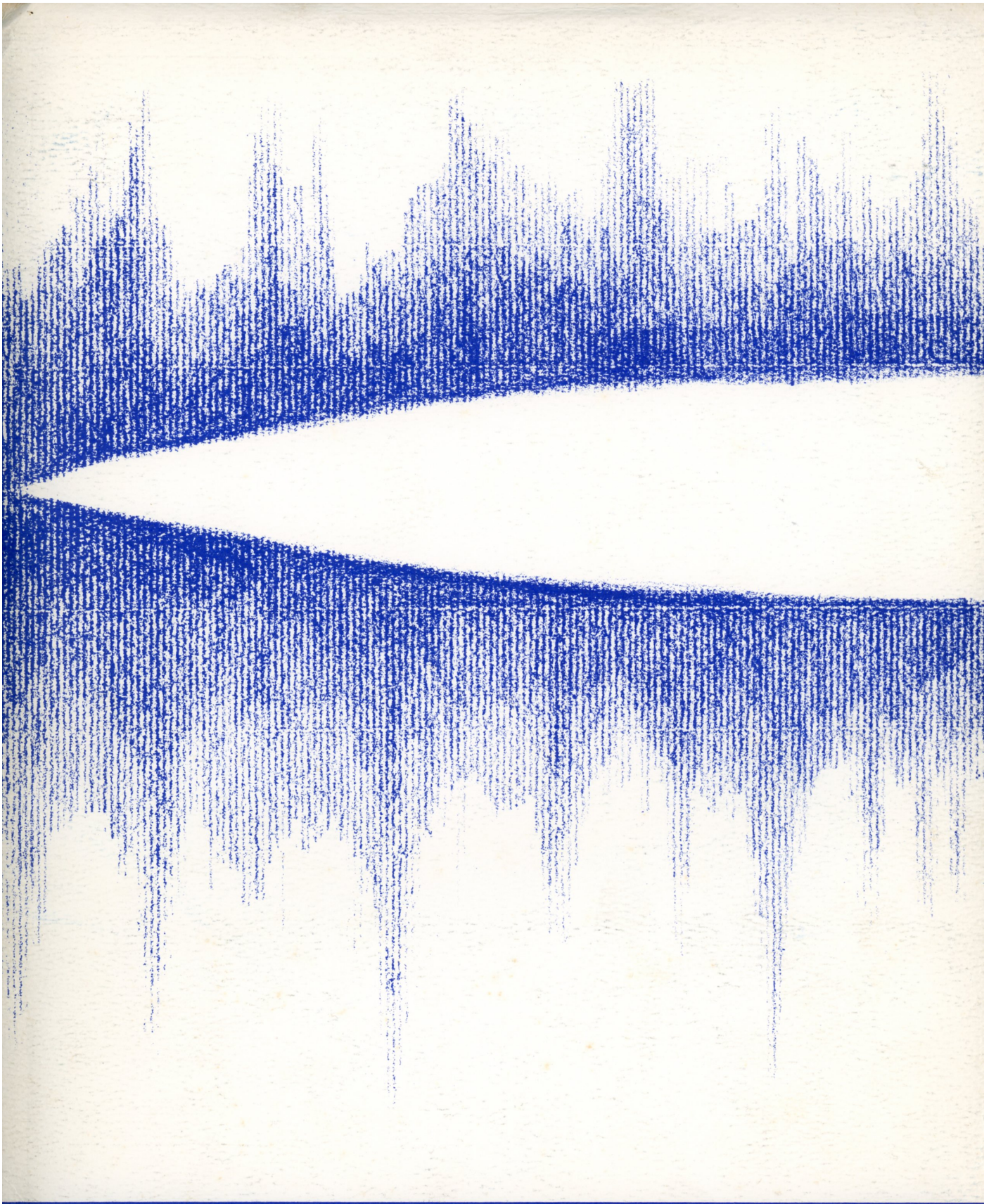


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OMEGA

**ASTRONAUT'S
WATCH**

PRESS INFORMATION



OMEGA WATCH COMPANY 301 E. 57th ST. NEW YORK, N.Y. 10022



THE WATCH OF THE ASTRONAUTS

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News Release

OMEGA WATCH COMPANY • PUBLIC RELATIONS DEPARTMENT • OMEGA BUILDING • 301 EAST 57TH STREET, NEW YORK, N. Y. 10022

FOR IMMEDIATE RELEASE

OMEGA, MOON-BOUND WRIST WATCH

SPACE CENTER, HOUSTON, TEXAS-From a jewelers showcase to the moon, that's quite a jump. And the Omega 4-dial Speedmaster chronograph made the jump without any beefing up, or changes to make it ready for such a historical event. It is the same wrist watch whether worn on the moon by an astronaut or on earth by a civilian. No other piece of equipment aboard the moon-ship can match that distinction.

The wrist watch, although a comparatively small item in the complex Apollo spacecraft, plays an important role in man's first journey to another celestial body.

It is the only timing device to be used by the astronauts on the moon to keep them on a rigid time schedule.

Omega's chronograph is a rugged, but intricate instrument. Made with extreme precision in the company's main plant at Bienne, Switzerland, each Omega chronograph has more than 150 separate parts which undergo a total of 1,497 inspections. Such extraordinary care means manufacture time is three or four times larger than for an ordinary watch. Every fourth employee of the factory is an inspector.

The lubricating oil is the world's costliest (\$2,000.00 per gallon), assuring minimum friction of parts and maximum longevity.

Omega holds accuracy records won in competition at leading observatories. Omega has timed nearly every Olympic Game

since 1932, including the 1968 Mexico City games where records were measured not only in the required 100'ths of a second, but 100,000ths of a second, indisputably deciding the winners.

In one machine shop at the Omega factory, scores of automatic lathes, tended by only a few engineers, produce parts which are barely visible to the naked eye. One such part, the balance staff, is 2.67 mm long, with a diameter of 0.10 mm through the center. Its extremities are formed of cylinders 0.63 mm in diameter and 0.01 mm long.

An ultrasonic cleaning laboratory, where the various parts are bathed in a special liquid, each particle of which is vibrated at the rate of 20,000 oscillations per second, insuring that every trace of dirt and impurities is shaken clean from the immersed part.

NASA chose Omega in as impartial a manner as could be conceived. After the Mercury program, astronauts and space officials determined that there was a need for a wrist watch. Engineers went to jewelry stores and bought four of the most popular brands.

Manned Spacecraft Center engineers started the torturous tests that all flight equipment must pass before it can fly with the astronauts.

First, the vacuum chamber where all the air was pumped out and pressures equalled those on the moon. Then heat was applied, 300 degrees above zero, and then cold, to below zero temperatures. Again matching the environment of outer space.

The watches were spun on a centrifuge up to 12 G's, twice as much as expected in space flight. Vibration tables shook the watches mercilessly. One by one the other watches failed. The Omega chronograph withstood the harsh treatment. Since the testing

GA 3.

the watch has been worn on 10 Gemini flights including five walks in space by the astronauts, and the four Apollo missions including the space walk by Apollo 9 Astronaut Russell Schweickart. There has not been a failure of an Omega watch in space.

The Omega Speedmaster chronograph has four dials which make it virtually a wrist computer. The large dial is easy to read and tells the time of the day. A smaller dial measures seconds and runs continuously. Another small dial registers elapsed time intervals in minutes after the sweeping large second hand has been activated by pushing one of the buttons on the watch. The third small dial measures elapsed hour intervals. The same dial that starts the elapsed time sequence stops it. A second button resets the elapsed time dials back to start.

The watch is made of stainless steel, is waterproof, antimagnetic and shock proof. An outer tachymeter scale measures speed races and per hour production out-put. The numbers are luminous on a black oxydized dial.

The Speedmaster chronograph is made by the Omega Watch Company of Switzerland, founded in 1848.

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MOON MOVEMENTS--TIMED BY OMEGA

SPACE CENTER, HOUSTON, TEXAS-First man on the moon Neil Armstrong's every movement for 2 hours and 40 minutes on that alien surface is well rehearsed, and timed to the second.

To keep within that split-second timetable, Armstrong and his moon walking partner, Edwin E. Aldrin Jr., each will have an Omega 4-dial wrist chronograph strapped to their left wrists.

The precision, award winning watch is the only piece of equipment to be carried on the moon that is exactly the same kind of wrist watch that you could buy in better jewelry stores around the world.

Time is an important ingredient to the moon-walkers. Their oxygen supply, batteries for power, communication links to earth, all are restricted by time. The astronauts and numerous engineers established that two hours and 40 minutes was the safe limit after several years of planning and countless rehearsals.

One such rehearsal happened a few weeks ago in a large warehouse at the Manned Spacecraft Center.

A full-scale lunar module sat in the middle of a man-made moonscape. Fine sand, small rocks and cinders, and a couple of large boulders surrounded three or four small craters. The lunar scene was as authentic as man on earth could make it without ever

(more)

having been there before.

Walking clumsily like a stiff-legged, top-heavy mummy, Aldrin glanced frequently at the watch on his wrist.

The bulky Apollo 11 space suit he was wearing made his movements slow and deliberate. As he dumped a shovel of simulated lunar sand into a plastic bag, he stole another look at the Omega 4-dial wrist chronograph strapped to his left arm to see if he was on schedule.

Meanwhile, the moon trip commander, Neil Armstrong, struggled awkwardly to erect an antennae. He too paid close attention to the time on his Omega chronograph.

Only the moon's one-sixth gravity was missing from the simulation. The heavy backpacks carrying the life sustaining oxygen and communication equipment added to the exceedingly hard work. On the moon, the weight of the equipment as well as the men will only weigh one-sixth of what it does on earth.

After Armstrong had scooped up a rock, placed it in an antiseptic sample bag, he placed it in one of his space suit pockets. Both astronauts spend a busy time collecting about 100 pounds of lunar surface, setting up a television camera so the world can share this historical moment, and activating scientific equipment to be left on the moon.

The Omega 4-dial wrist chronograph is the only timing instrument the astronauts will take with them on the moon. They, of course, will be advised of the time by ground controllers but the wrist watch is the only time piece the astronauts will have with them to keep track of the time.

The watches will be worn over the flap of the space gloves so they will be subjected to the sun's harsh, unfiltered rays.

Meanwhile, 60 miles up, circling the moon, Astronaut

Michael Collins will be on a time schedule of his own. He too has an Omega wrist watch to keep track of time.

How does a watch that was taken right out of a jewelers' showcase reach the moon without the many modifications given other space flying consumer products?

Omega's superior workmanship, which includes 1,497 separate inspections, is the reason. The watch, along with five other well-known brands, was tested by NASA and only the Omega 4-dial wrist chronograph passed.

It has flown with every astronaut since the first Gemini flight, without a single failure or criticism.

Many of the Gemini and Apollo astronauts use the watch everyday.

Col. Thomas Stafford has flown the same watch into space three times and wears it continuously. It runs perfectly.

Astronaut Richard Gordon took his Omega wrist watch out into space on Gemini 11 and has worn it ever since.