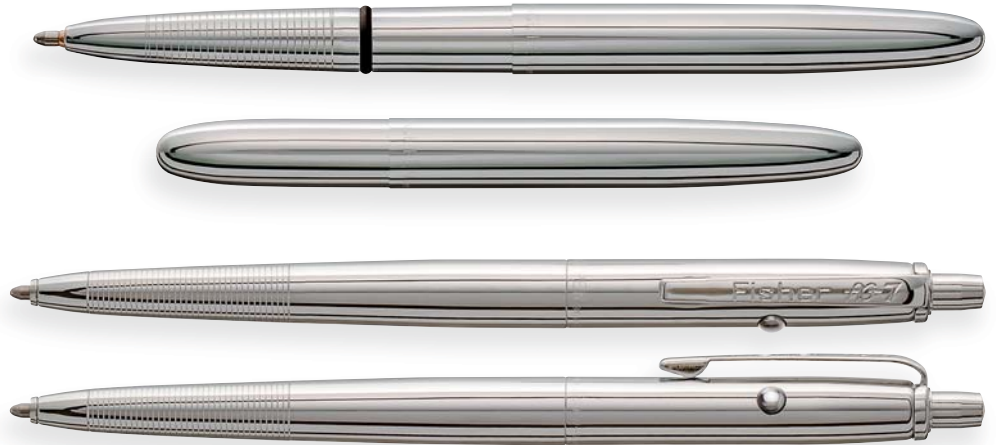


# Paul Fisher's Mission

BY GAEL DOWNS HEES

The Fisher Space Pen is inarguably the most well-traveled pen in the galaxy, invented in the middle of the last century by a man of great determination and vision.



Left—a young Paul C. Fisher revolutionized the pen industry with his line of Fisher Space Pen ballpoints designed to write in all environments. From top—a modern Fisher 400 Bullet Pen and AG-7 Original Astronaut Space Pen in polished chrome.

Only three years after the end of World War II, 1948 proved to be full of energy, change, and forward thinking. Nations were eager to work together to prevent further conflicts. The Treaty of Brussels was signed, and the World Health Organization was established.

Fashions were changing as materials became more available after war rationing, and Parisienne designs began to emerge after the occupation. Young people were reading the stories of Pippi Longstocking, the Hardy Boys, and Nancy Drew, while the literary voices of Alan Paton, Graham Greene, and Pearl S. Buck spoke to adults.

It was also a good year for inventions. The Polaroid camera was introduced. Velcro started making connections in our lives. Long-play vinyl records increased one's time on the couch listening to the likes of Bing Crosby, Patty Lee, and Ella Fitzgerald.

It was into this milieu that Fisher Pen Company emerged. Paul C. Fisher, founder, was just 35 when he started the company to manufacture pens and pen parts. At the time, Paul owned Fisher Armour Manufacturing Company, a machine shop in Chicago, Illinois. He was approached by Milton Reynolds of Reynolds Pen Company about setting up a production line to manufacture a new pen. After studying the samples Reynolds provided, Paul returned them, saying, "They aren't any good, the concept is faulty, and I'm not interested in the job."

But the universe often plays its hand in things. One of Paul's best friends, Seth McGrath, was given a job at Reynolds Pen Company, and Paul ended up helping design and set up the company's production line anyway. He was not paid for his work, but he did get Reynolds's parts business.

Shortly thereafter, Reynolds Pen Company went bankrupt. By then, Paul's interest in the ballpoint pen industry had grown, and with Reynolds's permission, he started Fisher Pen Company as a division of Fisher Armour Manufacturing.

Early in the company's history, Paul invented the Fisher Pen Company Bullet Pen, a metal, bullet-shaped pocket pen originally machined from a single rod of aluminum. Still one of the company's best sellers, the iconic Bullet Pen is in the collection of the New York Museum of Modern Art as a tribute to industrial design.

According to Matt Fisher, Paul's grandson and the current vice president of Fisher Space Pen, Paul had a deep, abiding philosophy: "Anything that is not being improved deteriorates. Therefore, I must strive to improve myself." That last line could be amended to read, "Therefore, I must strive to improve myself *and everything around me.*"

Fisher Pen Co. of California  
5900 N. Burnet Avenue  
Van Nuys, California 91401  
Attn: Mr. Paul C. Fisher

19. INSTRUCTIONS IN BLOCK 18.  
TRANSPORTATION OFFICER  
NASA Manned Spacecraft Center, 20202, 77058  
HOUSTON, TEXAS

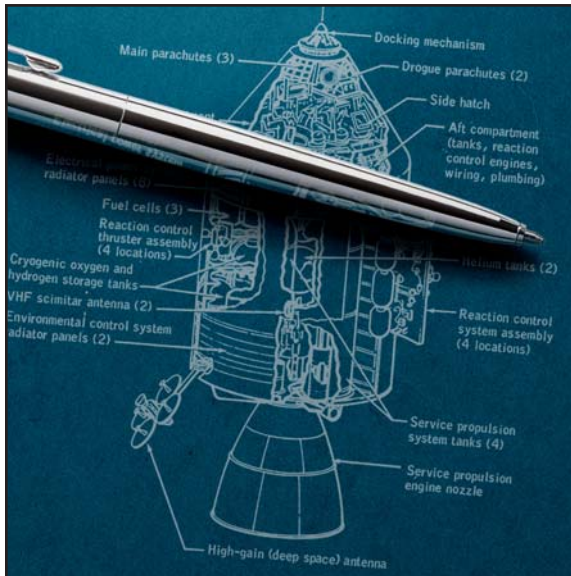
20. PAYMENTS: UNLESS OTHERWISE SPECIFIED PAYMENTS SHALL BE MADE MONTHLY IN ADVANCE UNDER THE FOLLOWING TERMS:

ITEM NO.	DESCRIPTION OF SUPPLIES OR SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT	REMARKS
1.	BALLPOINT PEN WITH PRESSURIZED INK CARTRIDGE. SHALL HAVE ALL METALLIC HOUSING, CURVED FLATED BRASS. SHALL HAVE NO NONMETALLICS, EXCEPT FOR INK. DEPOSED GUNNED METALLIC HOUSING, SHALL CONTAIN A PRESSURIZED INK CARTRIDGE CHARGED WITH BLUE INK, CAPABLE OF WRITING IN ANY POSITION (i.e., NONGRAVITY DEPENDENT). SHALL BE SPECIAL MODEL FISHER PEN COMPANY AG-7 WITH AG-1 PRESSURIZED INK CARTRIDGE. BRASS AND CAP SHALL BE CIRCULAR ENGINE TURNED. SHALL BE SUBJECTED TO THE FOLLOWING TESTS/INSPECTIONS BY THE VENDOR AND PROOF THEREOF SUPPLIED FOR EACH UNIT. A. VISUALLY INSPECT EACH INK CARTRIDGE WITH MICROSCOPE AND/OR ENDOSCOPIC TO INSURE ALL CRITICAL MANUFACTURING TOLERANCES OF BALLPOINT AND INK SEALS ARE MET. B. SUBMIT EACH INK CARTRIDGE TO A WRITING TEST TO INSURE PROPER INK FEEDING AND INK OPERATION.	1,000	ea.	2.55	2,550.00	
GR. TOTAL AMOUNT \$					2,550.00	
DIFFERENCE						

TYPE OF ORDER:  TELETYPE  WRITTEN QUOTE 31-59-57

DATE: 12/15/67

NAME: Charlie T. Slaughter 12-1-67



From top left—original 1967 purchase order for Fisher “ballpoint pen with pressurized ink cartridge” and Fisher AG7 ballpoint on NASA space capsule blueprint. Above—1968 sketch by Cosmonaut Alexei Leonov testing the Fisher Space Pen in an upside-down position.

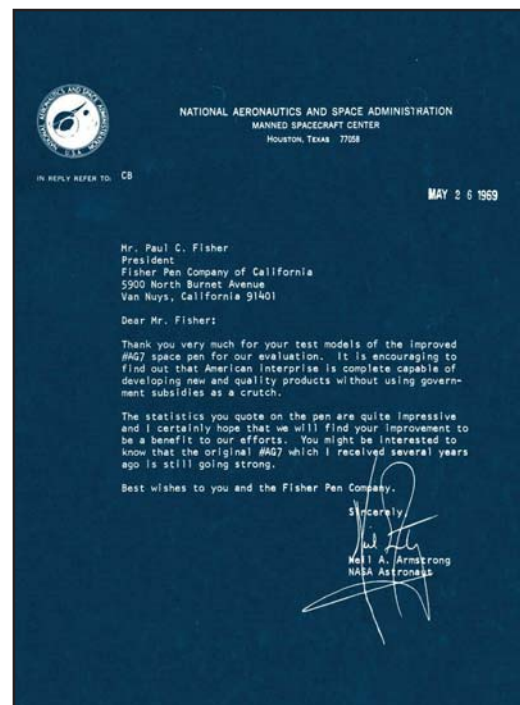
Below—thank-you letter from Astronaut Neil Armstrong to Paul Fisher.

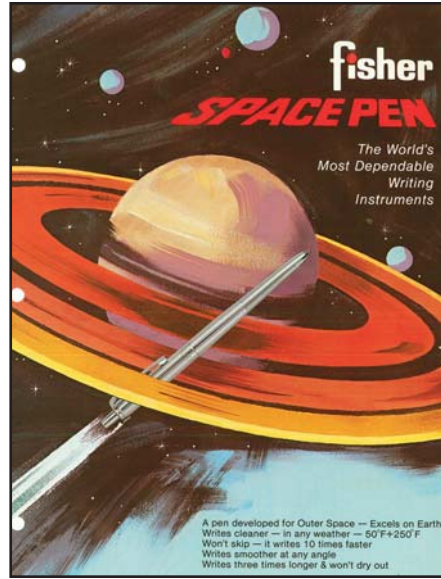
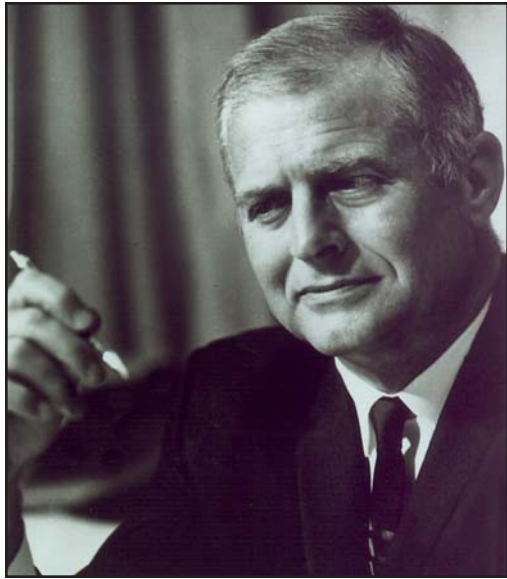
To that end, Paul kept thinking about the ballpoint pen. It was both a high-volume sales success and a dismal mechanical failure. Millions were sold in the first years of availability, and manufacturers jumped into the market. But the ballpoints leaked from the tip and back, and the ink didn’t dry quickly after use.

Plus, there were challenges for retailers. Each of the more than 50 ballpoint pen companies in the United States at the time had its own design and refill system. So, for every brand carried, the retailer had to have eight different refills: four different colors of ink for each of two point sizes.

In 1949, in addition to producing his own pens, Paul started making adapters for as many ballpoint pen brands as possible. Sold with his own branded refill device, these adapters allowed pen owners (and retailers) to buy a Fisher Pen Company refill cartridge and adapter and use it in a pen of a different brand. This decision alone brought the company more than \$1,000,000 in annual sales.

The Fisher adapter system was somewhat of a solution, but an inelegant one, and Paul still wasn’t satisfied. With the new capital, Paul continued his research, envisioning a sealed pressurized cartridge. He tried many mechanical solutions, but in his mind, it was the ink itself that was the ultimate problem. Paul hired a chemist on a consulting basis and a new plant manager with quality control experience.





From above left—Paul C. Fisher circa 1960; late 1960s advertisements for the Fisher AG7 Space Pen promoting its ability to write anywhere. Right—advertisement for AG7 Fisher Space Pen saluting U.S. leadership in space exploration.

In the same year, the Paper Mate ballpoint pen was introduced by the Frawley Pen Company. It reportedly didn't leak, and the ink dried almost instantly. The result was that Fisher Pen Company quit selling pens and refills until they could purchase a similar ink.

In 1954, Paul filed a patent application for a *Universal Type Refill Cartridge for Ball Point Pens* (U.S. Patent No. 2860602A, granted November 18, 1958). It didn't leak, and it fit most pens on the market. This was the solution he was looking for—almost. He still didn't have a formula for his own ink.

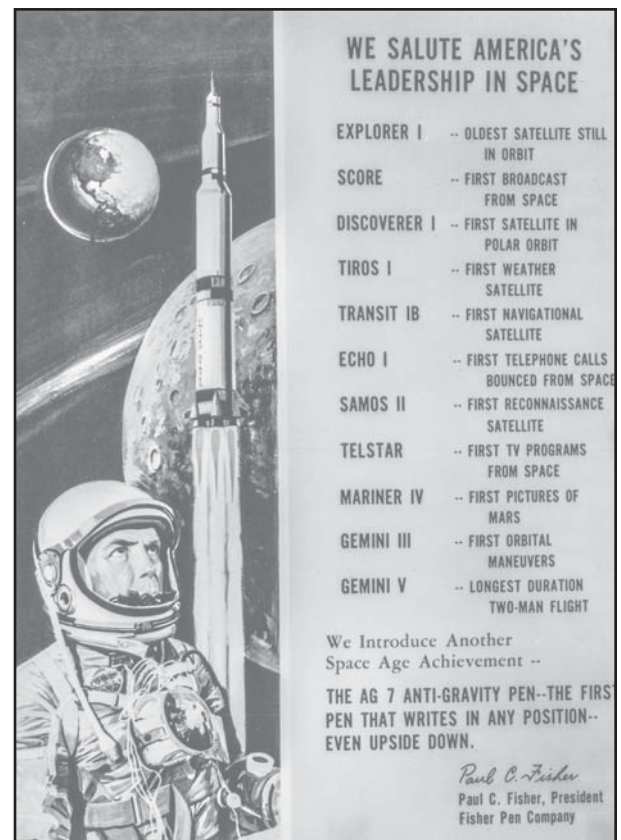
In the late 1950s or early '60s, the industry's largest supplier of ink put out a batch that went bad in a scant few months: the pens completely dried up. By the time the problem was discovered, manufacturers, including Fisher Pen Company, had sold many pens and refills containing the faulty ink. The supplier offered to replace the ink, but Paul refused the offer and found a new supplier.

The new dilemma? Defective merchandise needing to be replaced. Bankruptcy seemed the only choice, as Paul couldn't afford to refund the money to all his customers. He encouraged his employees to seek other jobs, but if they stayed, he would pay them for as long as possible. In the meantime, they would connect with each customer and offer to replace the product at no charge or refund the cost.

Reaching out and standing by the integrity of its products ensured customer loyalty for Fisher Pen Company, with most customers accepting the replacement and some making additional purchases. Other companies were not as generous; many lost their customer base, only to discover that the replacement batch of ink was also defective, and those companies ultimately went bankrupt.

Paul spent years refining and experimenting with different ink formulas, to the point of dreaming a solution. According to Matt, the following is a slight paraphrasing of a story Paul liked to tell:

For more than one night I dreamed that my deceased father came to me and said, "Paul, if you add a minute amount of rosin to the ink, that will stop the oozing," speaking of the ink formula. The chemist I was working with thought this was ludicrous but tried adding different types and amounts of the rosin to no avail. Months later, the chemist thought that resin, not rosin, was what my father had meant. Two percent of resin in the formula made all the difference.





Left and above—modern Original AG7 Fisher Astronaut Space Pen at work and in new “capsule” box packaging.  
Bottom—modern Fisher 400 Chrome Bullet Pen in sleeve and with box packaging.

After a million dollars spent on research, Paul filed another patent application on May 19, 1965, for an *Anti-gravity Pen* (U.S. Patent No. 3285228A, granted November 15, 1966). With a proprietary ink and a refill pressurized with nitrogen gas, this new pen not only didn't leak, it could also write in the zero-gravity environs of outer space, upside-down, underwater, over oil and grease, in extreme temperatures (-30° F to +250° F) and three times longer than the average ballpoint.

Paul developed the pen with space travel in mind and immediately started reaching out to NASA. Coincidentally, at the same time, NASA representatives had been told to contact Fisher Pen Company by an acquaintance of Paul's, Ed Melugin of Dallas Pen, because “Paul does more research than anyone.”

After rigorous testing, NASA sent the Fisher Space Pen on the 1968 Apollo 7 mission and every space mission thereafter. In 1969, the Russians adopted the Space Pen, buying 100 units for future space missions. In 2021, Richard Branson and his crew members signed the flight log on the initial Virgin Galactic flight with a Fisher Space Pen.

Paul C. Fisher lived a full creative life, dying at the age of 93 in 2006 at his home in Boulder City, Nevada. He ran twice for president and twice for the U.S. House of Representatives. He wrote several books and had more than 15 U.S. and international patents to his name, one for a bread rack he developed when he worked for his uncle's bakery at age 23.

And his legacy lives on. Fisher Pen Company (DBA Fisher Space Pen since 1986) is in the capable hands of Paul's son, Cary Fisher, president of Fisher Space Pen, and Matt. They and other family members are committed to continuing the family tradition of developing, designing, and selling pens to be used on the Moon, Mars, and beyond.

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