

INTERNATIONAL WATCH



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TAG Heuer woos women  
(and adds this new men's  
Link model). See page 50.

# TAG Heuer's

## *Beauties*

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- **Tourbillon Watches**
- **Russian Evolution**
- **Racing Across Dakar**
- **John Glenn's Heuer:**  
**Was this the First Swiss**  
**Watch in Space?**

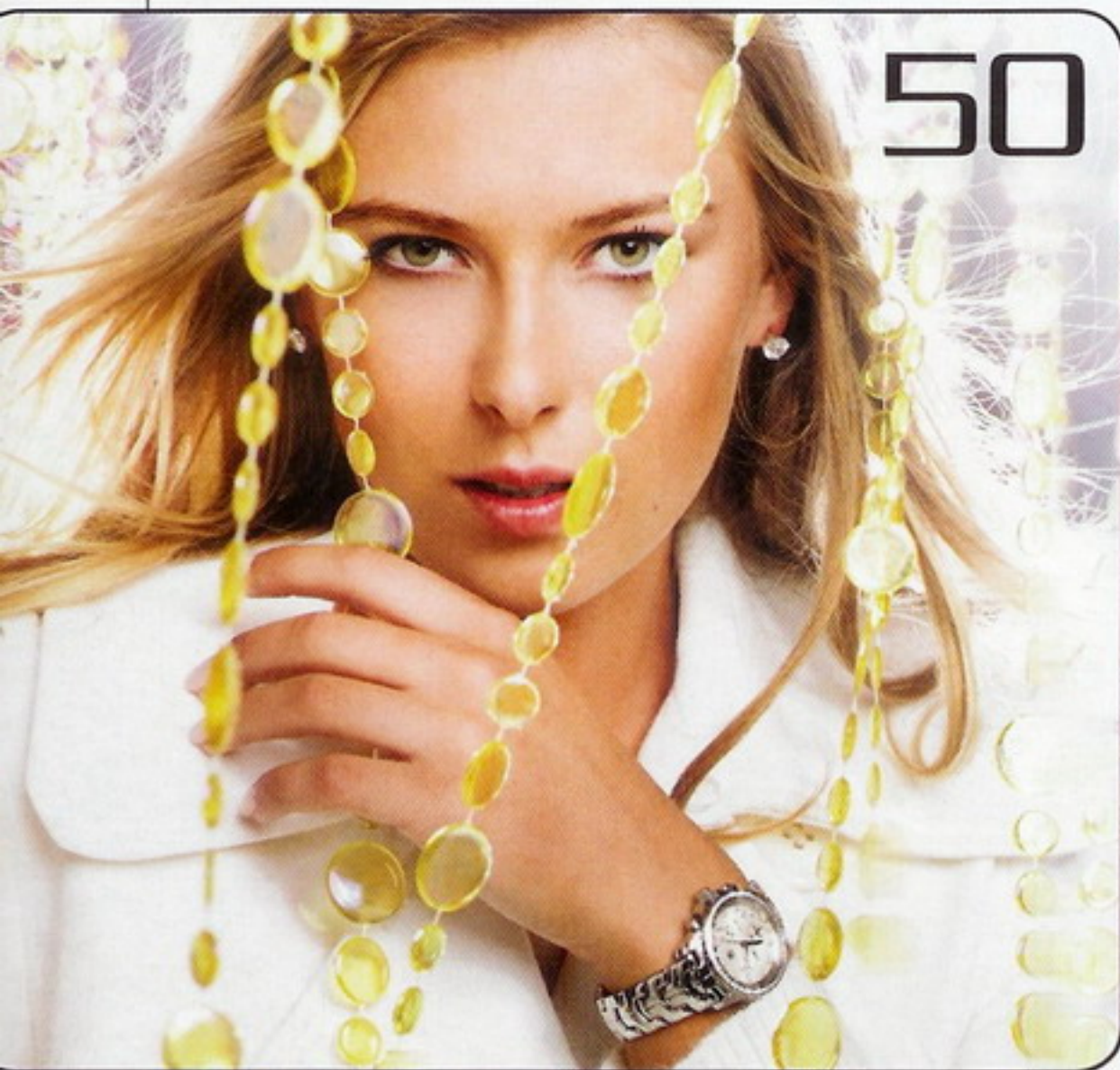


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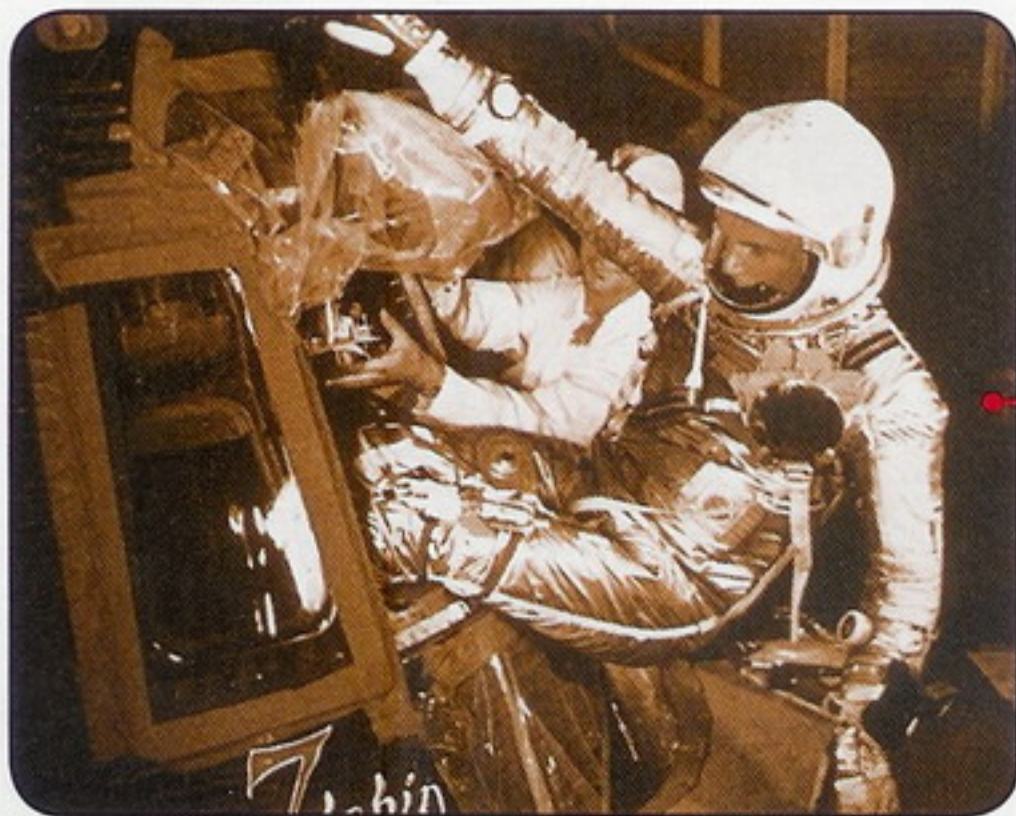
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## Cover Story



# Strength and Beauty

With winners as ambassadors and a palette of newly glamorous watches, TAG Heuer plans to seduce more women.



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## The World...and Beyond

Most of our name is *International*. But sometimes it's only the *Watch* portion that is most obviously appropriate when perusing this magazine.

Not this month.

Inside this issue are detailed reports of players in the watch industry from around the globe, including a regular feature that will focus on the brands based in Germany.



You'll find a look at the rarely seen world of Urban Jürgensen, an influential firm that informs much of Denmark's horological legacy. Our Swiss Correspondent, Ian Skellern, looks at founder Jorgen Jürgensen's close ties with the Swiss industry and that early watchmaker's influence in both countries.

Our extensive review of Soviet watchmaking history puts into perspective the extensive manufacturing that occurred there throughout the twentieth century. We've seen more and more interest in the in-house capabilities of these brands, many of which are today gathered under new ownership for global distribution.

From the Isle of Man, near England, watchmaker Roger W. Smith creates handcrafted timepieces in the shadow of his mentor, the great George Daniels, whose workshop is also on this blessed Isle. As watchmaker Curtis Thomson reports inside this issue, Smith's work does justice to its influences and does so with modern assistance from a machine named Kern.

Citizen lets us inside its enameling studios in Japan to glimpse at how the firm creates the stunning dials on its Campanola watches using *aizu ware* techniques. The results are rich and colorful and an appropriate complement to the hand-finished cases the firm uses for Campanola, which this year finally reaches the United States.

And, finally, breaking free of all international borders, we head to space. In a special report inside, we unveil how one man's cellphone image of a pocket watch in a museum in San Diego led to the re-discovery of what may be the first Swiss watch in space.

Maybe we ought to rename ourselves *Celestial Watch*.

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Blast-Off! The Atlas rockets used in the Mercury space missions were adapted from intercontinental ballistic missiles. High atop the rocket were John Glenn and his Heuer stopwatch, built to withstand the high G's of the blast-off and re-entry.

BY PHILLIP GOODLOE

# The Discovery of John Glenn's Heuer

## The First Swiss Watch in Space



From Treo™ to Web site to TAG Heuer. Within a few weeks of its discovery, images of John Glenn's Heuer stopwatch went from this fuzzy photograph (snapped with a cellphone camera), to this image created at OnTheDash.com, to senior officials at TAG Heuer. The Internet allowed communities of enthusiasts to compile, assess and disseminate information that had been "lost" for the previous forty-four years.  
 Photos: Sheldon Smith (left) and Jeff Stein (right)



**H**ow many times have we heard people describe the wonders of the Internet? Whether enjoying video chats, booking vacations or listening to our favorite podcasts, the Internet has changed the way we communicate and share information. Watch collectors are particularly enthusiastic about new worlds opened through the Internet. Online auctions and dealer sites bring us watches we could never have hoped to find at watch shows or flea markets; we form communities in which we discuss our interests, show off our prizes and console each other for the ones that got away; beautiful Web sites cover the broadest subjects (military watches or vintage timepieces) as well as some very specific

topics (the history of the Breitling Navitimer, or watches that use the Lemania 5100 movement).

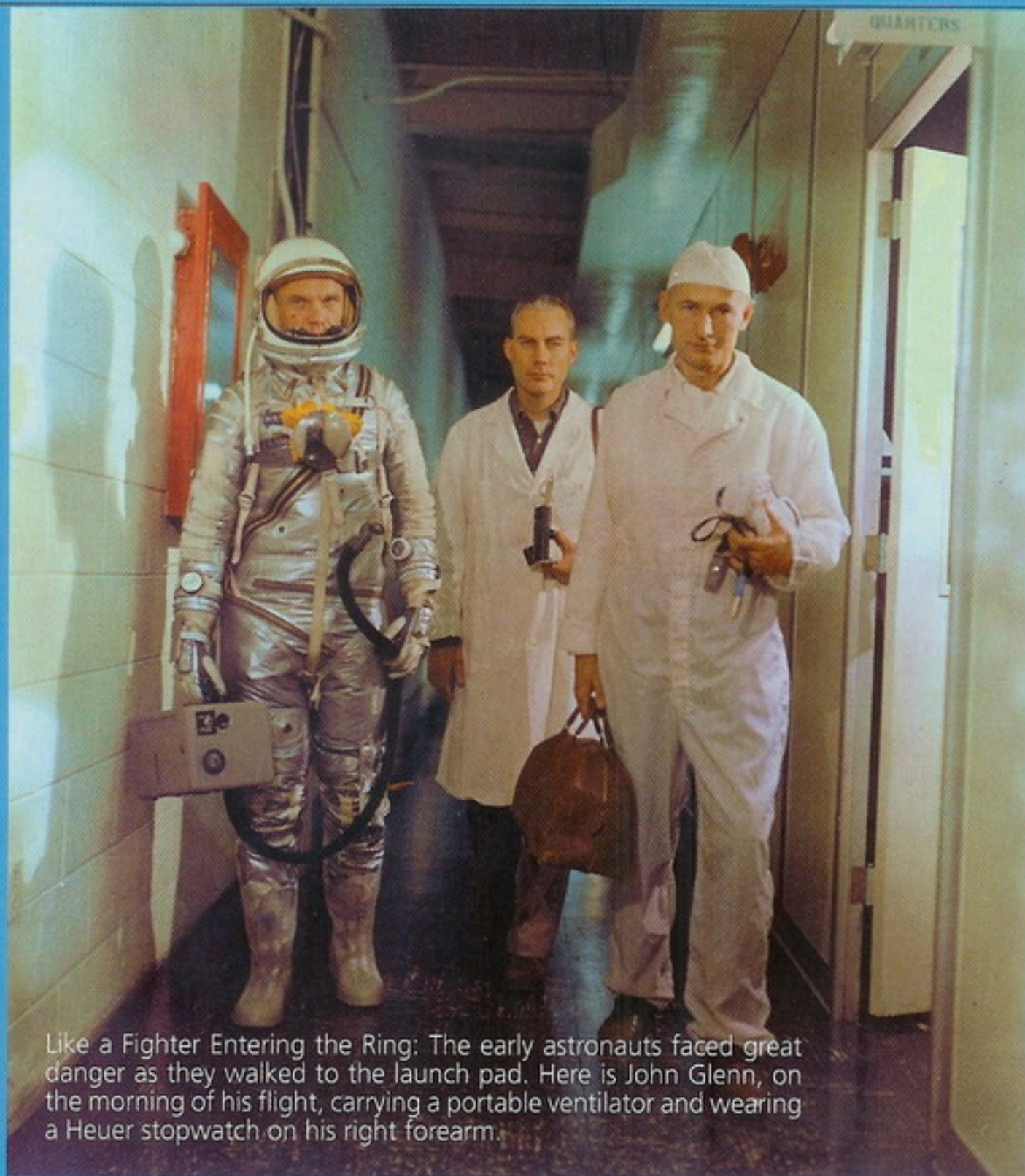
For those who are interested in historically important watches,

the Internet offers immense areas for exploration. Only recently, we have seen an auction featuring an Omega that belonged to President John Kennedy. Rolex dedicates a



page on its Web site to Sir Edmund Hillary and his Explorer. With each new James Bond movie, collectors of Rolexes and Omegas recount stories of their favorite Submariners and Seamasters. With the release of movie classics on DVD, enthusiasts study their old favorites, frame-by-frame, to identify the watches that may appear on screen, even if only for a few seconds. Computers generate the dramatic screen shots, and within hours of the release of a new DVD, romantic images of our heroes move from discussion forum to Web site to e-mail messages. Steve McQueen with his Heuer; John Kennedy with his Omega; Raquel Welch with her Breitling. Frame-by-frame and image-by-image, enthusiasts cherish the romance of their favorite brands and add to the mystique of their watches, long after their heroes are gone.

This article tells a different story—it's not about the movies or Hollywood heroes, but about the watch worn by one of America's greatest heroes, on an early mission into space. It's not about product placement or sponsorships or partnerships between watch brands and their ambassadors; it's about how NASA (the United States' space agency) and its astronauts used a particular watch for a critical mission. It is also about how communities of watch collectors and history buffs—linked by the Internet and exploring the depth of its reference materials—combined to add a new chapter to the history of watches, and partic-



Like a Fighter Entering the Ring: The early astronauts faced great danger as they walked to the launch pad. Here is John Glenn, on the morning of his flight, carrying a portable ventilator and wearing a Heuer stopwatch on his right forearm.

ularly a chapter that links one of the great romantic figures in world history with a watch brand that has its own long and storied history. This is the story of a recent discovery—that John Glenn, the first American astronaut to orbit the earth, was wearing a Heuer stopwatch, making that watch the first Swiss watch in space.

#### Watches in space

There has been considerable interest in watches that have been worn in space. As those who explored the seas needed accurate clocks to navigate the globe, and as train engineers relied on their watches to time their transcontinental journeys, the cosmonauts and astronauts relied on their watches

to time maneuvers in space and to track their missions. The selection of watches for space missions received considerable attention, and as astronauts and their watches returned to earth, the marketing departments of the major Swiss brands celebrated the courage of the space cowboys and the toughness of their watches. For all the talk of a watch being rugged, reliable and legible, what better endorsement than to be selected by NASA or the Soviet space agency to be used on a mission into space. Review the advertising used by Breitling or Omega in the 1960s, and you will see that these brands used their pedigree in space to sell watches back on earth. Bulova, Fortis, Sinn and Bell & Ross followed suit, as their watches and

# Air-ground communications of John Glenn's flight

Time of Communication (hr/min/sec)	Duration of Communication (sec)	Communicator	Transcript
		Capsule Communicator	3 . . . 2 . . . 1 . . . 0
00 00 03	4.0	Glenn	Roger. The clock is operating. We're underway.
00 00 07	1.5	Capsule Communicator	Hear loud and clear.
00 00 08	2.0	Glenn	Roger. We're programing in roll okay.
00 00 13	3.5	Glenn	Little bumpy along about here.
00 00 15	1.0	Capsule Communicator	Roger.
00 00 17	2.0	Capsule Communicator	Standby for 20 seconds.
00 00 19	0.5	Glenn	Roger.
00 00 20	2.0	Capsule Communicator	2 . . . 1, mark.
00 00 23	3.3	Glenn	<b>Roger. Backup clock is started.</b>
00 00 32	5.0	Glenn	Fuel 102-101 [percent], oxygen 78-100 [percent], amps 27.
00 00 39	3.0	Capsule Communicator	Roger. Loud and clear. Flight path is good, 69 [degrees].
00 00 43	4.0	Glenn	Roger. Checks okay. Mine was 70 [degrees] on your mark.
00 00 48	2.5	Glenn	Have some vibration area coming up here now.
00 00 52	2.0	Capsule Communicator	Roger. Reading you loud and clear.
00 00 55	4.0	Glenn	Roger, Coming into high Q a little bit; and a little contrail went by the window or something there.
00 01 00	0.5	Capsule Communicator	Roger.

The Mystery is Solved: Why was Glenn wearing the stopwatch and why was it preset to the 20-second mark? A careful review of the flight transcript answers both questions: It was the back-up clock for the mission; Glenn started the Heuer stopwatch manually at the 20-second mark of the flight.

John Glenn's Heuer was a standard model, with twelve-hour capacity and 1/5 second accuracy. Shown here in a 1962 Heuer catalog, the stopwatch sold for \$27. It seems likely that NASA procured the watch from a store or supplier, rather than directly from Heuer or through a procurement process.

**HEUER LONG RANGE 1/5 SECOND  
TIMER**

*Time-out feature*

*7 jewels—nickel-chrome plated case*

**Reading:** Large hand makes one complete cycle in 60 seconds. The upper small minute hand registers up to 60 minutes. The lower small hand registers up to 12 hours. The dial reads in 1/5 seconds.

**Operation:** Start, stop and go on by consecutive depressions of the crown. Return to zero by side push pin when hands are at rest.

Ref. 2915 A NET PRICE: **\$27<sup>00</sup>**

chronographs were used on space missions of the 1970s and 1980s.

**The conventional history**

But what were these watches that the astronauts used on the early space missions? According to conventional learning, the sequence of watches in space was as follows: On man's first flight into space, in April 1961, cosmonaut Yuri Gagarin wore a Russian-made Sturmsanskije chronograph. Next on the timeline was astronaut Scott Carpenter, who wore a Breitling Cosmonaut when he became the fourth American astronaut in space, in May 1962. Wally Schirra launched the Omega era in October 1962, when he became the first person to wear a Speedmaster in space. From there, the Speedmaster became the watch most closely associated with the United States space program and was the first watch to be worn by a U.S.

astronaut on a space walk (June 1965) and the first to be worn on the moon (in July 1969). (For a history of the watches worn in space, see Steve Lundin's article, "Time in Space," in Issue 40 of *International Watch* (1999), available online at <http://www.onthedash.com/docs/IW40.pdf>.)

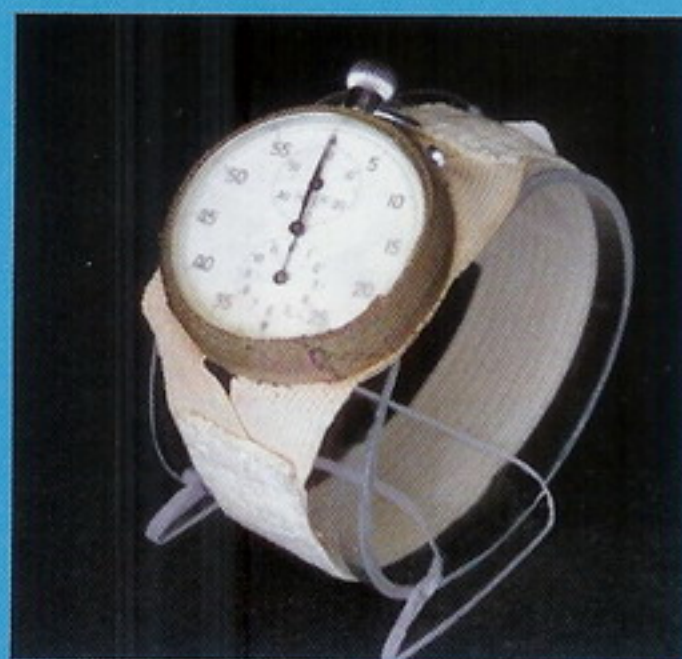
To recount this conventional history raises some questions about the earliest United States astronauts. Before Scott Carpenter flew with his Breitling Cosmonaut, the United States sent astronauts Alan Shepard, Gus Grissom and John Glenn into space. Which watches did they wear? Until recently, the understanding was that these three astronauts decided that they would not wear watches on their missions. Given the array of instruments in their small capsules, and the fact that these astronauts did not leave their capsules during their missions, there was no reason to think that an astronaut would have needed to wear a watch during his flight.

**The discovery of  
John Glenn's Heuer.**

Skip ahead to July 2006, when Sheldon Smith, a school administrator living in Central California, was visiting San Diego for an education conference. While Sheldon attended the conference, his wife and nine-year-old son visited the San Diego Air and Space Museum, and the next day, they took Sheldon to the Museum to have a look for himself. In a showcase with artifacts from the early space flights, something caught Sheldon's eye

—a stopwatch attached to a broad elastic band, designed to be worn with a spacesuit. The card accompanying the display indicated that this was the watch worn by John Glenn when he became the first American to orbit the earth. Being a watch enthusiast and the son of a NASA physicist, Sheldon was familiar with the conventional history of the watches worn in space—Breitling, Omega, etc. He was also certain that he had never heard the name "Heuer" mentioned as part of this history.

Armed with a camera in his cellphone, Sheldon snapped a couple of photos of the exhibit, which he soon posted to two Internet watch discussion forums. His messages began with the sentence, "I stumbled across this Heuer stopwatch while visiting the San Diego Air and Space Museum yesterday." His messages received little attention on these discussion forums—the two postings received a total of only four responses, not much attention by the bustling standards of Internet discussion forums. Some e-mail



The stopwatch is currently on display in the San Diego Air and Space Museum.





Why was this bit of history not mentioned in any of the Heuer histories—for example, the historical timeline featured on TAG Heuer’s Web site or the year-by-year timeline published in Heuer’s history, *Mastering Time*? If John Glenn had been wearing a Heuer, surely this would have been featured prominently somewhere in these Heuer histories. After an e-mail message to Switzerland confirmed that TAG Heuer was not aware of Heuer’s having had any role in the space program, Stein determined that he would attempt to research and write this particular chapter of Heuer’s history.

#### A deep dive into the NASA archives

Though he had not previously explored NASA’s online archives, Stein quickly found an impressive array of information regarding the early days of the United States’ space program and John Glenn’s flight, in particular. In a few hours online, he located numerous photographs of John Glenn on the day of his mission, a full transcript of communications between Glenn and NASA’s Capsule Communicator during the flight, detailed diagrams of the Friendship 7 capsule, and several comprehensive reports reviewing Glenn’s flight. Most interesting were the photographs of Glenn from the day of his flight, walking to the launch pad and entering the capsule. Each of these photographs clearly showed that, half-way up his right forearm, Glenn was wearing a large stopwatch. This stopwatch, and the unique elastic strap that

attached it to his wrist, certainly appeared to match the Heuer stopwatch that Sheldon Smith had photographed at the San Diego Air and Space Museum.

A careful review of these photos raised some questions. First, what was the purpose of Glenn wearing this stopwatch? With at least four timers installed in the instrument panel, why was the astronaut wearing a chunky stopwatch on his forearm? More peculiarly, in carefully studying the photos of John Glenn walking to the launch, Stein noticed that the stopwatch was set on the 20-second mark. Why was this stopwatch preset to 20 seconds, rather than being on zero?

#### Suddenly, the mystery is solved

After puzzling about these questions for some days, Stein unraveled the mystery through an examination of the transcript of Glenn’s flight. Shortly after launch, at the 20 second mark of the flight, the Capsule Communicator indicated to Glenn that the 20 second mark was approaching. At the 20 second mark, Glenn stated, “Back-up clock is started.” With this statement from the transcript, the mystery of John Glenn’s Heuer stopwatch was solved. This Heuer stopwatch was the back-up clock for the mission. It was preset to 20 seconds, and at the 20-second mark of the flight, Glenn hit the crown to start the stopwatch running. (This same sequence of communications occurs on Wally Schirra’s Mercury mission, in

traffic among those who saw Sheldon’s photos suggested that John Glenn couldn’t possibly have worn a Heuer—with so many photos and documents covering Glenn’s flight, how could enthusiasts and amateur historians have “missed” this watch for so many years?

Though Sheldon’s messages on these discussion forums attracted little attention, one of the individuals who read Sheldon’s message and examined the photos was Jeff Stein. An Atlanta corporate lawyer, Jeff is one of the leading Heuer collectors in the United States and the author of [www.OnTheDash.com](http://www.OnTheDash.com), a Web site dedicated to vintage Heuers. Knowing well the history of the Heuer brand, and also being generally familiar with the watches worn in space, Sheldon’s message and photographs raised several questions for Stein.



October 1962. At the same 20-second mark, he confirms to Mission Control that “Back-up is started and running good.”)

Just as Sheldon Smith publicized his “find” through a posting on the Internet, so too Stein added a special page to his OnTheDash.com Web site, to publicize the discovery of John Glenn’s Heuer. (You can view the page at [www.onthedash.com/docs/Glenn.html](http://www.onthedash.com/docs/Glenn.html).) Stein also contacted marketing personnel and archivists at TAG Heuer, in Switzerland, to provide them with information about John Glenn’s Heuer stopwatch.

#### Some mysteries remain

And so, 44 years after John Glenn orbited the earth with his Heuer and two months after Sheldon Smith visited a museum in San Diego (with his camera phone!), TAG Heuer has added a chapter to its history. Still, some questions

remain. As John Glenn’s watch went unnoticed all these years, what about his predecessors in space—Alan Shepard and Gus Grissom? How certain can we be that they didn’t wear watches (or stopwatches) on their missions? Where was John Glenn’s Heuer stopwatch all these years? The Smithsonian Museum refers to itself as the “Nation’s Attic.” Could this old stopwatch have been in the attic (or the proverbial sock-drawer) for over four decades?

Perhaps most intriguing is the question of what TAG Heuer will do with this new chapter in the history of the brand. TAG Heuer has drawn on its rich history in sports timing to create watches that pay tribute to the legendary racers—the “Monaco” that honors Steve McQueen, the “Targa Florio” that honors Juan Manuel Fangio, and the Jo Siffert “Autavia,” among many others. How

might TAG Heuer now draw on its new connection with John Glenn, the man who might be considered the ultimate racer or adventurer? Sure, some will say that Glenn’s timepiece was “just a stopwatch” (and not even a watch or chronograph), but it’s only a small step from a 12-hour stopwatch to a traditional time-of-day watch. More optimistic Heuer enthusiasts are hoping that TAG Heuer will go beyond the “small step” of a simple watch, and make the “giant leap” to the production of a full chronograph that will be a tribute to John Glenn, the first American to orbit the earth. Perhaps through the development of such a timepiece, Heuer will be able to fully celebrate its accomplishment of producing the first Swiss watch worn in space!

#### One thing is certain

Following the discovery of John Glenn’s Heuer stopwatch, there are these questions, but one point seems certain: This same community of enthusiasts that discovered the watch, and developed and disseminated the details of its history, will continue to follow the story of TAG Heuer’s most cherished stopwatch. However it found its way onto John Glenn’s wrist, and wherever it may have been these past forty-four years, and whatever it may inspire from TAG Heuer, the community of space buffs and watch enthusiasts will be adding photos, posting messages, exploring the archives, and chatting all the while . . . enabled by this unique space we call the “Internet.” ☺