



the world's watch information resource

- Watch Talk
- Brand Forums
- Community
- News & Features
- Resources & Tools

[Home](#) > [Brand Forums](#) > [Omega](#) > "Will the new Speedy Pro ever be flight qualified?"

[Email to friend](#) | [Unsubscribe from topic](#)

Goto Forum:

Omega

-
-
-

Author	Topic	
--------	-------	--

giorgiannia

Will the new Speedy Pro ever be flight qualified?

Mar 27, 2007 - 06:47 AM



Posts: 2875
Location: Manassas, VA
Registered: January 2005

- [\[add to buddy list\]](#)
- [\[ignore all posts by this user\]](#)

I am wondering if Omega is going to migrate all their Speedy Pro Moon Watched over to the new 3201 movement, and if so, will it ever get flight qualified? It would be a shame it Omega will stop providing a flight qualified mechanical watch.

What is everyone else's opinion?

Regards,

Pete

Habit(n): A shackle for the free.

[\[Report message to a moderator\]](#)

-
-
-

y2keable

good point, its something i worried about

Mar 27, 2007 - 07:04 AM



Posts: 3487
Location: Northumberland, England
Registered: January 2005

- [\[add to buddy list\]](#)
- [\[ignore all posts by this user\]](#)

incidentally, does anyone have a picture of the 3201 movement? i don't think i've seen it.



[\[Report message to a moderator\]](#)

-
-
-

Fergie

Re: Will the new Speedy Pro ever be flight qualified?

Mar 27, 2007 - 07:05 AM



Posts: 828
Location: North Lincolnshire, UK
Registered: October 2006

If it wasn't going to be flight qualified I think it would be a shame too. After all, its the history that makes the Speedy Pro such a special watch.

Vodka-martini. Shaken or stirred? Do I look like I give a damn?

[\[Report message to a moderator\]](#)

[\[report message to a moderator\]](#)[\[add to buddy list\]](#)[\[ignore all posts by this user\]](#)[profile](#) [EMAIL](#) [PM](#)[reply](#)**mherzog**

Posts: 876

Location:

Texas, USA

Registered:

February 2006

Re: Will the new Speedy Pro ever be flight qualified?

Mar 27, 2007 - 08:17 AM ▲▼

Actually, only the caliber 321 was ever "flight qualified" by NASA. The tests were conducted in the early 1960's and Omega was unaware of this until AFTER Ed White's spacewalk during Gemini IV.

It is not our abilities that show what we truly are; it is our choices.

[\[Report message to a moderator\]](#)[\[add to buddy list\]](#)[\[ignore all posts by this user\]](#)[profile](#) [EMAIL](#) [PM](#)[reply](#)**giorgiannia**

Posts: 2875

Location:

Manassas, VA

Registered:

January 2005

Then how did the 861 become certified for flight?

Mar 27, 2007 - 08:27 AM ▲▼

I would assume that too would have had to undergo testing.

Thanks!

Pete

[\[add to buddy list\]](#)[\[ignore all posts by this user\]](#)

Habit(n): A shackle for the free.

[\[Report message to a moderator\]](#)[profile](#) [EMAIL](#) [PM](#)[reply](#)**Damon****I believe he was qualified 861 was during the second round of testing...**

Mar 27, 2007 - 08:29 AM ▲▼

Posts: 9006

Location:

Palm Harbor, FL

Registered:

October 2003

due to Bulova's whining about the watch on American astronaut's wrist is Swiss and not American. Needless to say the Speedmaster Pro once again came out on top while the other watches failed.

Best Regards,

Damon

[\[add to buddy list\]](#)[\[ignore all posts by this user\]](#)

When your watch gets out of order you have a choice of two things to do: throw it in the fire or take it to the watch-tinker. The former is the quickest. -Mark Twain

[\[Report message to a moderator\]](#)[profile](#) [EMAIL](#) [PM](#)[reply](#)**Roddy11913****Re: I believe he was qualified 861 was during the second round of testing...**

Mar 27, 2007 - 08:56 AM ▲▼

Posts: 21

Location:

Milwaukee WI

Damon is correct. The Speedy Pro actually went through a series of more stringent tests in the late 70's. During this time Omega was up against many more watches than they originally had

Registered:
March 2007

[\[add to buddy list\]](#)
[\[ignore all posts by this user\]](#)

to compete with in the first round of tests. The .861 caliber was approved for all of the Shuttle flights and is still one of three flight qualified watches today and is the only watch approved to EVA activity.

[\[Report message to a moderator\]](#)



JBagnall



Posts: 1373
Location:
Vancouver BC
Registered:
October 2004

[\[add to buddy list\]](#)
[\[ignore all posts by this user\]](#)

But Wait there's more...2 Tests

Mar 27, 2007 - 09:04 AM

The Omega Speedmaster went up against the competition on two occasions, not just in 1964, but again in the early 70's.

The Speedmaster was flight qualified the first time in 1964 and that was the 321 caliber. Only Rolex, Omega and Longines were tested. The test is listed here:

NASA test of 1964:

High temperature: 48 hours at 71° C (160F) followed by 30 minutes at 93° C (200F). Pressure of 0,35atm and relative humidity not over 15%.

Low temperature: Four hours at -18° C (0 F).

Temperature-pressure: 1.47x10⁻⁵ psia and temperature raised to 71° C (160F). Temperature then lowered to -18° C (0F) in 45 minutes and again raised to 71° C (160F) in 45 minutes. This cycle was repeated fifteen times.

Relative humidity: 240 hours in relative humidity of at least 95% and at temperatures varying between 20° C (68F) and 71° C (160F). Steam had a pH value of between 6,5 and 7,5.

Oxygen atmosphere: Exposure to 100% oxygen atmosphere at a pressure of 5.5 psia and a temperature of 71° C for 48 hours.

Vibration: Three cycles of 30 minutes (lateral, horizontal and vertical), the frequency varying from 5 to 2000cps and back to 5cps in 15 minutes. Average acceleration per impulse 8,8g.

Shock: Six 11 millisecond shocks of 40g each in six different directions.

Acceleration: Linear acceleration from 1g to 7,25g within 333 seconds.

High pressure: Exposure to 1,6atm for one hour.

Decompression: 90 minutes in a vaccum of 0 10-6 atm and a temperature of 71° C and 30 minutes in the same vaccum but at a temperature of 93°C.

Acoustic noise: 130dB over a frequency range from 40 to 10000Hz for 30 minutes

Results of the tests :

The Omega Speedmaster : gained 21 minutes during decompression test and lost 15 minutes during the acceleration test , the luminescence of the dial was lost during the test

In 1965, NASA chose the Omega Speedmaster Professional as the official chronograph for the space program.

In the early 70's there was pressure placed on NASA to use American made products. Bulova led the charge. This forced NASA to re-do their testing using different watches. These included, Omega, Breitling, Bulova, Girard-Perregaux, Heuer, Seiko, Rolex, Zodiac, Longines-Wittnauer, and a few others. The watch that was tested was the 861caler Speedmaster. In 1972 The Omega Speedmaster was again selected as the watch of choice for NASA.

For a point of interest, there was at least one report saying that if the Astronauts were required to wear some other watch, they would still wear a Speedmaster as "insurance".



Best, Jeff B

[\[Report message to a moderator\]](#)

[profile](#) [email](#) [PM](#)

[reply](#)

Chicagoland Chuck Maddox

1] c.32xx's are NOT Pro models, 2] c.861's WERE tested by NASA in the 1970's, 3]

Mar 27, 2007 - 09:07 AM



Posts: 5074
Location:
Chicagoland (GMT-6)

1] **c.32xx's are NOT Pro models** [at least from what we've seen so far]. They do not say **Professional** on the dial and unless there is "Professional" markings elsewhere on the watch, let's not call them that, unless and until Omega calls them that.

Winter...
Registered:
November 2003

2] c.861's WERE tested by NASA in the 1970's during the ramp up to the shuttle missions. Please access TZ Classic 1801 (link below) and these are the pertinent paragraphs:

In August of 1972, sixteen companies were notified by NASA that the Manned Spacecraft Center (MSC) planned to establish a Qualified Product List (QPL) for possible future procurement of astronaut watches. This list included:

1. Breitling Watch Corporation
2. Bulova Watch Company
3. Elmore Watch Company
4. Elgin National Watch Company
5. Forbes Company, S. A.
6. Girard-Perregaux Company
7. Gruen Watch Company
8. Hamilton Watch Company
9. Heuer Time
10. Electronic Corporation
11. LeJour Watch Company
12. Longines-Wittnauer Company
13. Omega Watch Company
14. American Rolex Company
15. Seiko Watch Company
16. Zodiac Watch Company

[snip]

In September 1978, astronaut chronograph watches wishing to be considered for the space shuttle program underwent yet another round of prescribed space flight environmental testing. This included vacuum, low temperature, pressure, vibration, acceleration, salt-fog, humidity and shock testing. Responses to the NASA procurement requests were recieved from the Bulova Watch Company and the Omega Watch Company in Bienne, Switzerland. Bulova submitted a proposal offering one type of chronograph, sold to NASA for \$1 each. Omega submitted 3 proposals for 3 separate models.

The chronograph determined to be in compliance with the environmental requirements, achieving the highest technical score, and offered at the lowest price would be purchased. The technical evaluation team determined that, of the chronographs submitted by Bulova for space flight environmental testing, no single watch was exposed to all environmental tests. Also, one watch failed in salt-fog testing and all 3 watches exposed to vacuum testing failed to show adequate sealing. Accordingly, the Bulova chronographs were determined to be in non-compliance with the specified environmental requirements.

Once again, the Omega chronograph was superior to the other chronographs tested. The Speedmaster Professional met all environmental requirements, had the highest technical score, and was offered at the lowest price. Therefore, the Omega was accepted for procurement. It is significant to note that this was the identical model which had been submitted in 1962. (note: more or less). The watch was offered to NASA at the cost of \$0.01 per watch.

3] To answer Pete's original question...

giorgiannia Posts: Will the new Speedy Pro ever be flight qualified? [Mar 27, 2007 - 06:47 AM]

The new models are NOT Speedmaster ~~Pro~~'s.

I am wondering if Omega is going to migrate all their Speedy Pro Moon Watched over to the new 3201 movement,

No one outside of Omega/Swatch knows. They would be exceedingly stupid if they killed the moonwatch though. Let's hope they aren't that stupid.

and if so, will it ever get flight qualified?

Only if NASA would want to run it through it's testing gauntlet. And the question you'd have to ask is why would NASA want to do that for a Manual Wind watch? Wouldn't they prefer an automatic, perhaps with additional features compared to the current "Moonwatch" model they use, if not an Eco-Drive or Quartz movement of some sort.

Would Omega really want to rock the boat with NASA?

[Michael Stein 1801 : Interesting article on the Speedmaster's history](#)

-- [Chuck](#)

[Chuck Maddox](#)



Chronographs, like most finer things in life, only improve with time...
[Watch Article Index: http://www.xnet.com/~cmaddox/cm3articles.html](http://www.xnet.com/~cmaddox/cm3articles.html),
[Watch Links Page: http://www.xnet.com/~cmaddox/watch.html](http://www.xnet.com/~cmaddox/watch.html),
[Watch Blog: http://chuckmaddoxwatch.blogspot.com/](http://chuckmaddoxwatch.blogspot.com/).

[\[Report message to a moderator\]](#)

[profile](#) [email](#) [PM](#)

[reply](#)

giorgiannia



Posts: 2875
 Location:
 Manassas, VA
 Registered:
 January 2005

[\[add to buddy list\]](#)

[\[ignore all posts by this user\]](#)

Thanks Chuck!!

[\[Report message to a moderator\]](#) Mar 27, 2007 - 09:54 AM ▲▼

As usual a wealth of knowledge in your reply. :)

Pete

Habit(n): A shackle for the free.

[\[Report message to a moderator\]](#)

[profile](#) [email](#) [PM](#)

[reply](#)

BreitlingFan



Posts: 773
 Location:
 Mitchellville, Maryland
 Registered:
 November 2003

[\[add to buddy list\]](#)

[\[ignore all posts by this user\]](#)

Does NASA even care anymore about testing watches?

[\[Report message to a moderator\]](#) Mar 27, 2007 - 12:59 PM ▲▼

In the early days of the space program, everything that was even remotely considered for flight was tested. Nowadays, space has largely been demystified so we know what is likely to work and what's not. I don't think NASA would go to the time and expense of testing a wrist watch like they did in the beginning when they were going "where no man has gone before."



"... keeping track of mere seconds gained or lost is a path towards madness ..." - tom friend

[\[Report message to a moderator\]](#)

[profile](#) [email](#) [PM](#)

[reply](#)

Damon

They still test them...

[\[Report message to a moderator\]](#) Mar 27, 2007 - 01:08 PM ▲▼

Posts: 9006
 Location:
 Palm Harbor, FL
 Registered:
 October 2002

for use in ISS and the orbiter. The Timex Data-link and one of the G-Shocks, and the X-33 have been officially qualified for use on missions (non-EVA use). Astronauts can wear other watches, but I do believe for timing events during experiments, and things of that nature, they

October 2003

have to use an approved watch.

[\[add to buddy list\]](#)

Best Regards,

[\[ignore all posts by this user\]](#)

Damon

When your watch gets out of order you have a choice of two things to do: throw it in the fire or take it to the watch-tinker. The former is the quickest. -Mark Twain

[\[Report message to a moderator\]](#)

[profile](#) [email](#) [PM](#)

[reply](#)

Goto Forum:

Omega

Previous Topic: [Lots of Bond today....](#)

Next Topic: [GMT models...May sound dumb but why should I care?](#)

[\[Generate printable PDF \]](#)