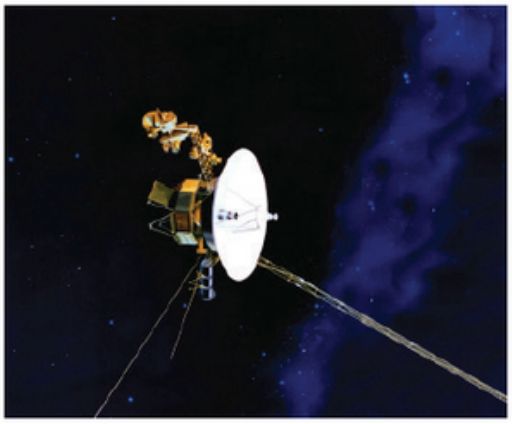
FOR IMMEDIATE RELEASE

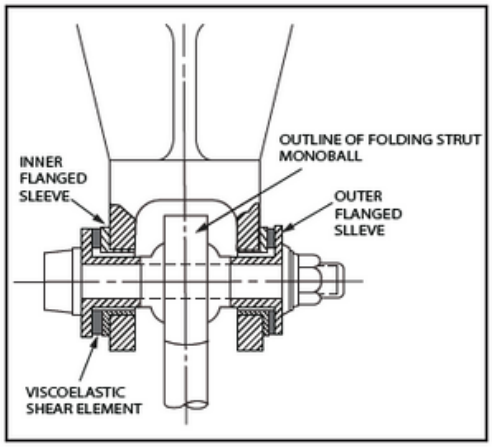
How a Polyurethane Element Helped Chronicle Voyager's Journey into Interstellar Space

DEER PARK, N.Y., Feb. 20, 2014* / — Last September, headlines across the third planet closest to the Sun announced a 36-year-old spacecraft had successfully crossed over from our Solar System to the great unknown of interstellar space.



Voyager 1 Spacecraft

Voyager 1's primary mission wasn't to be history's first interstellar spacecraft. Originally this spacecraft, and its second cousin Voyager 2, were launched to fly by and observe the planets of Jupiter and Saturn. Voyager 1 actually launched two weeks after the Voyager 2, on September 5, 1977. However, scientists knew even then that Voyager 1 would one day leave the Solar System. That's why two gold records were stored on the spacecraft with recorded greetings in 55 languages, 117 images, a variety of natural and manmade sounds, and music ranging from Beethoven to Chuck Barry.



Soundcoat's DYAD 606 product helps dampen vibration for retrieval of images from Voyager 1

On board at launch was also the latest technology of the time, considerably low-tech by today's standards. For example, Voyager 1 was equipped with 69.63 KB of memory, 240,000 times less memory than an iPhone 5. The radio receiving antenna was fitted with a 22.4-watt transmitter, the equivalent to a refrigerator light bulb. Today, it takes a message 17 hours to travel one way to the Voyager 1. However, when you realize Voyager 1 is travelling at around 38,000 mph and is now more than 11 billion miles from Earth, the fact we can still communicate with this probe is a scientific feat in itself.

But if it wasn't for a polyurethane viscoelastic shear damping material weighing mere ounces, some of the scientific discoveries observed during the planetary exploration portion of this historic flight might not have otherwise been made. Nor would the schoolbooks in today's classrooms be filled with the extraordinary photos Voyager 1 transmitted back as it flew by Jupiter, Saturn and Saturn's biggest moon – Titan.

In pre-flight tests, NASA learned that the remotely controlled rotation of the TV cameras caused a low-frequency vibration to the camera platform resulting in blurred images or even forcing transmission delays until the vibration settled down.

By incorporating components made from viscoelastic shear damping material into the boom support brackets, the settling time was reduced to 3 seconds. The polyurethane elements are sandwiched between, and bonded to, the inner and outer flanged sleeves of each bracket assembly. The inner flange provides a stationary base, and the outer sleeve moves with boom deflection, allowing the thin-section shear dampers to absorb boom vibration and preserve the clarity of the images. The viscoelastic washer-like elements used on Voyager 1 were formed with DYAD 606, manufactured by Soundcoat Co. Inc. of Deer Park, N.Y. DYAD 606 was specifically chosen for its ability to provide high damping over the broad range of temperature and frequency changes the Voyager might encounter as it hurtled through space. The Voyager DYAD 606 material features a Durometer hardness of 67A and a Tensile Strength, MPa (PSI) of 17 (2400), per ASTM D-412.

The scientific discoveries brought on by the quality of the images beaming back to earth due to this solution came quickly in Voyager 1's journey. In March 1979, NASA saw for the first time a thin ring surrounding Jupiter. Soon detailed pictures of the Galilean moons showed them to be far more than sterile spheres. Volcanoes were spotted for the first time on a low camera setting. Photos from a close pass of Europa showed a surface that could have ice, or even an ocean, underneath.

When Voyager approached Saturn in 1980, more surprises awaited NASA. Voyager's cameras discovered several new moons, a new ring around the planet and then captured the first close-up photos of the mammoth moon, Titan. At Voyager's closest approach to Titan on November 11, 1980, spacecraft instruments confirmed what the images showed – that the moon had a substantial atmosphere, possibly even denser than Earth's.

As Voyager 1 continued its way past Saturn, usurping Pioneer 10's distance as the farthest machine man has ever sent from Earth, it continued taking photos including the first shot of our Solar System as seen from the outside looking in.

In 1990, Voyager 1 arguably took one of the most incredible photographs ever. At the request of Carl Sagan, the Voyager 1 spacecraft, which had completed its primary mission and was leaving the Solar System, was commanded by NASA to turn its camera around and take a photograph of Earth across a great expanse of space. Referred to as the "Pale Blue Dot", Voyager snapped a picture of the earth from a record distance of about 6 billion kilometers (3.7 billion miles) away. In the photograph, Earth is shown as a fraction of a pixel (0.12 pixel in size) against the vastness of space.

The Voyager 1 continues to impress scientists every day as new data streams back from this extraordinary space probe and amazingly, there remains enough electrical power to sustain scientific measurements through 2020. The images Voyager 1 has shot along its way now grace many scientific journals and schoolbooks as testament to the success of the program – all made crystal clear thanks to an exceptional DYAD 606 washer-like viscoelastic elastomer element.

Since the launches of Voyager 1 and 2 in 1977, Soundcoat's DYAD product has been used to damp vibrations across a wide range of commercial applications in the aerospace, aircraft, marine, transportation, military, medical and off-highway industries.

Soundcoat is proud to be ISO-9001-2008 and AS 9000 registered. Soundcoat is part of the Recticel Group, a Belgium based company. Recticel has 110 establishments in 27 countries and is a publicly traded company (NYSE Euronext: REC – Reuters: RECTt.BR – Bloomberg: REC:BB). Recticel is listed on NYSE Euronext in Brussels.

** This press release has been updated for visual branding but retains the original message as it was when it was published in 2014.*