

A NASA ROCKET IS ON A CRASH COURSE WITH AN ASTEROID - AND IT'S ALL IN THE NAME OF SCIENCE.
ITS MISSION - TO TEST NEW TECHNOLOGY IN AN EFFORT TO SAVE OUR PLANET SOMEDAY.

Press **Esc** to exit full screen

((NATS))

nats 3-2-1 we have liftoff

THIS IS NASA'S FIRST-EVER PLANETARY DEFENSE MISSION - CALLED DOUBLE ASTEROID REDIRECTION TEST OR DART.
THE SPACECRAFT WILL SLAM INTO THE ASTEROID DIMORPHOUS AT 15 THOUSAND MILES PER HOUR - WITH THE HOPES OF CHANGING
ITS COURSE.

((SOT))

Bill Nelson/NASA Administrator

"It may be the way to save planet Earth if there's ever an inbound big asteroid that could really challenge our existence as a planet."

((NATS))

it's what we call a global killer.

EVEN NASA ADMINISTRATOR BILL NELSON AGREES - IT SOUNDS LIKE SOMETHING OUT OF THE FILM "ARMAGEDDON"

((NATS))

"The United States government just asked us to save the world. Anybody want to say no?"

BUT INSTEAD OF DESTROYING A KILLER ASTEROID WITH A BOMB - LIKE BRUCE WILLIS DID - THE ROCKET CRASH INTO DIMORPHOUS -
TO TRY AND SLOW DOWN ITS ORBITAL SPEED.

((SOT))

Bill Nelson/NASA Administrator

"If it's successful, then if we had a real inbound killer asteroid, we could do that with it, and it would miss us."

WHILE THE CHANGE OF SPEED MAY BE SMALL - THAT CHANGE MULTIPLIES OVER THE YEARS - AND WILL ULTIMATELY MISS EARTH.

((SOT))

Bill Nelson/NASA Administrator

"The DART mission is creating an explosion and a debris field way out millions of miles in space where it is not harming anything."

AND THIS MISSION HAS A LOCAL CONNECTION AS WELL.

FOR THE PAST 18 YEARS - U OF M'S DR. JON VAN NOORD HAS BEEN WORKING ON AN IMPROVED TYPE OF THRUSTER, CALLED THE "NEXT
ION THRUSTER," - AND THIS DIFFERENT WAY TO GENERATE PROPULSION WILL FINALLY BE TESTED ON THE MISSION.

((SOT))

((Instead of burning things, it uses an atom, in our case it's Xenon gas, and it pulls off the electrons and why that's important is because now I
have a charged particle, and that charged particle we can accelerate by putting it through an electric field and accelerate to really high
velocities.))

THIS TECHNOLOGY WILL BE CRITICAL IN FUTURE MISSIONS.

((SOT))

((It will definitely be a technology that will provide a massive amount of velocity to really give a good punch when you want to hit and deflect
an asteroid.))

DART WILL ARRIVE ON DIMOPHOS NEAR THE END OF SEPTEMBER NEXT YEAR.

THERE ARE NOT CURRENTLY ANY KNOWN ASTEROIDS THAT ARE A THREAT TO PLANET EARTH-- BUT THERE'S NO GUARANTEE THAT'S
ALWAYS GOING TO BE THE CASE.

THAT'S TECH TIME WITH ME ANDREW HUMPHREY BACK TO YOU.