

The Wreck of the Spacecraft Cassini

(to the tune of "The Wreck of the Edmund Fitzgerald" by Gordon Lightfoot)

The legend lives on from Cassini on down of a planet'ry system that's crazy.
The lake's seen it's said, in the near-infrared when the skies above Titan turn hazy
A trusty Centaur on an old Titan Four lifted off in nineteen ninety-seven
It was soon on its way on a VVEJ, and it sped night and day through the heavens

'Twas a seven-year trip, this was no pirate ship of Jack Sparrow, Blackbeard, or Vizzini
A good ship and true, with many fields of view was the craft they named after Cassini.
As big flagships go, it was bigger than most, thirteen feet wide, in height more than twenty
A payload it bore, a dozen instruments more than the spacecraft Cassini had empty

The Doppler signal made a tattle-tale sound; the main engine groaned with exertion
And everyone knew as through the ring plane it flew it achieved Saturn Orbit Insertion.
When Christmastime came, the Huygens detached sayin', Cassini it's been good to know ya
It fell for three weeks on to Titan's ice beach, it said humans I've got pics to show ya

Cassini looked about, saw tidal heat leaking out the four tiger stripes of Enceladus
A south polar plume like a vapor-ice 'shroom had pushed its way through the ice shell at us
The cameras then spied, hundreds of meters high, the ice cliffs of distant Dione
That wispy terrain in extensional strain is as brittle as dry macaroni

Does anyone know why Iapetus shows hemispheric two tone coloration?
They say dark debris from more distant Phoebe -- but the ridge still needs more explanation
It might have spun down or it might have thrust out, or a ring collapsed on the equator
And all that remains are the places and names of the terrae and montes and craters

Propeller-like structures roll through the rings in the moons there are ice-water oceans
The planet's hexagon jetstreams constrain endless polar hurricane motion
And on Titan below, Lake Ontario takes in what the channels can send it
The rain on the plain falls mainly as methane but the dry southern autumn may end it.

In a musty old hall in Pasadena they watched in the Jet Propulsion Laboratory
They all hung their heads as the signal went dead when Cassini had ended in glory
The legend lives on from Cassini on down of the gas giant planet called Saturn
Titan's surface it's said, we one day will tread, and we're already planning a return!