

Cassini: Mission Planning Exercise

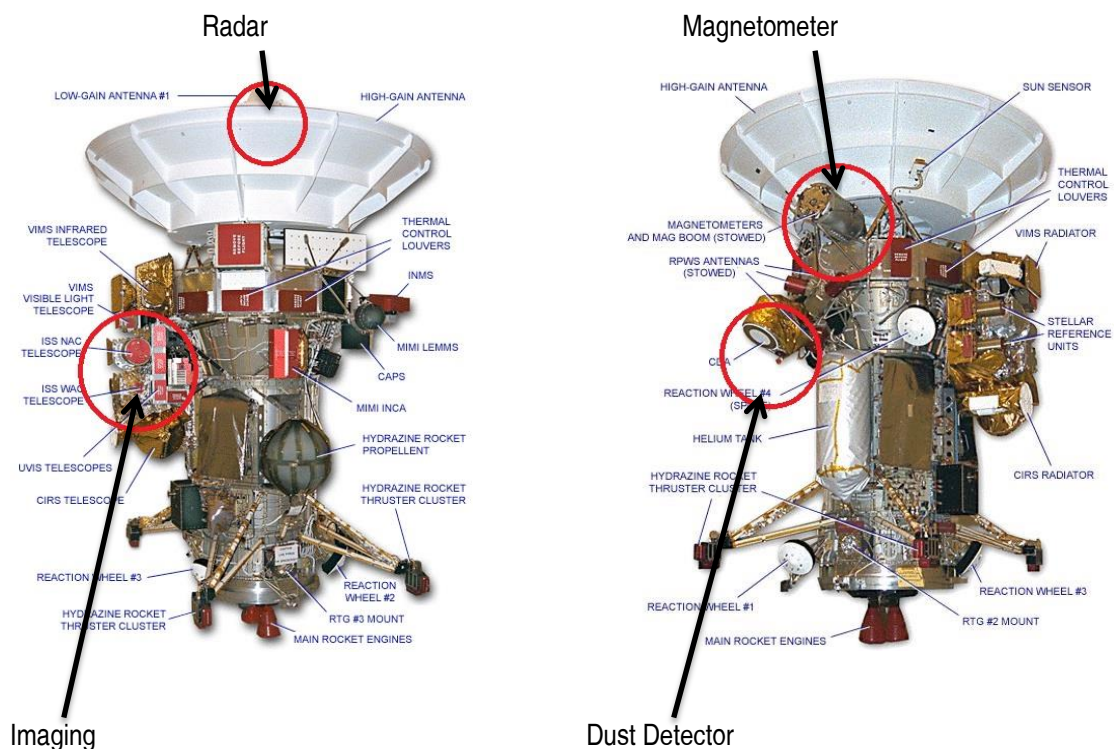
Task Overview

You are being given control of a £2 billion spacecraft for the next seven days. In teams, you need to select your targets and decide on the instruments you want to use. Each decision you make must be backed up by a scientific argument because once each team has made their selection you then need to agree between you on who has the use of the spacecraft for each time segment. Bear in mind that more than one time segment may be wanted by different teams. This is not possible as not all instruments can be used at once due to the design of the spacecraft.

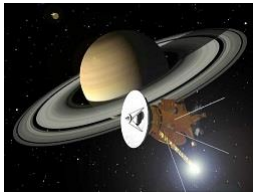
Your spacecraft

The Cassini spacecraft launched in October 1997. Its journey to Mars took 7 years and on the way it visited the Moon, Venus and Jupiter. However, the process of designing and building the spacecraft started in the 1980s and in general space missions do take a number of years from the initial idea to launch and then normally a while longer as the craft makes its way across the vast distances between planets in the Solar System.

Astrophysics is different to the other sciences in that there aren't a lot of experiments we can do. Instead we need to observe the universe around us and try to draw conclusions from the evidence we find. The Cassini spacecraft is a tool to help us understand more about planetary formation. By studying the interaction of the rings and moons of Saturn (there are over 60) we can perhaps learn more about the formation of the Solar System.



What else is Cassini hoping to find in its time at Saturn?



Cassini: Mission Planning Exercise

Cassini's Journey:

The Cassini spacecraft orbit 2005 DOY45 to 2005 DOY52

