

HOW SCIENTISTS HOPE TO SAVE THE OZONE LAYER

One CFC molecule destroys up to 100,000 ozone molecules a year. However it is estimated that 25 electrostatic platforms located high above the Earth's poles could restore the depleting ozone layer within a decade

Solar panels power the ion engines and charge the electrostatic curtains

Antennae for control and communications links with ground station

Ion engines stabilise platform against wind

Four helium-filled air balloons (500 metres long) provide platform for electrostatic curtains

COMPARATIVE ALTITUDES

35 miles

30 miles

25 miles

Ozone platform altitude up to 25 miles

20 miles

Cockroft SR71 altitude 19 miles

15 miles

Commercial jet altitude 6 miles

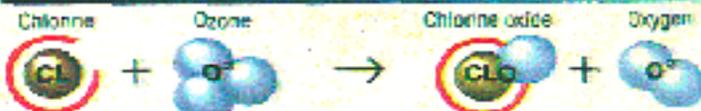
5 miles

Mt Everest

OZONE LAYER 9 TO 26 MILES

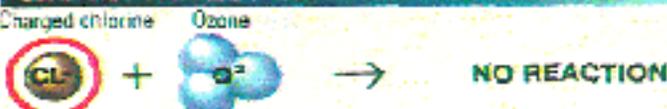
Electrostatic curtains (200 metres tall) made of zinc and aluminium wire tubes neutralise CFC molecules by charging them with an electron

OZONE DESTRUCTION



Chlorine, a CFC gas, with an incomplete outer shell of 5 electrons, steals an electron from ozone to form oxygen and chlorine oxide causing the destruction of the ozone molecule and a reduction of the ozone layer

OZONE PROTECTION



The chlorine molecule, having received a charge from the electrostatic curtain, has a complete outer shell of electrons and therefore will not react with the ozone

SR71 'Blackbird' will test effectiveness of ground station radio waves that may be used to clean the curtains of charged CFC particles