

A FLYING SAUCER CHARTS THE SKIES

WAY up, nearly 20 miles overhead, a "flying saucer" is travelling over Sydney.

Suddenly, in response to a radio order, a little glider cuts adrift from it.

There's no one aboard the glider, yet as it reaches the thicker atmosphere below, it twists and turns in obedience to radioed commands and finally lands at a chosen spot.

That's no secret war weapon; it's a C.S.I.R.O. homing glider bringing back cosmic ray records from the upper air.

Cosmic rays are mysterious electrified particles shot at the earth from interstellar space.

They arrive at the top of the atmosphere charged with such terrific electric energy that they smash

open atoms more completely.

open atoms more completely than any man-made machine.

These smashes reveal the inner secrets of the atom, information vital both to "pure science" and to atom bomb research.

In Australia, to get ordinary information on upper air conditions, small hydrogen-filled balloons are sent up daily.

They carry instruments which radio back to the ground (in code) wind velocity and direction at different heights as the balloon rises.

At a certain height (up to 90,000 feet) the balloons burst and the instruments drift down, a small inner balloon acting as parachute.

In only a small percentage of cases are the instruments recovered.

Here's where the C.S.I. R.O. home glider comes in.

Still in the experimental stage, the glider will also help recovery of weather instruments.

instruments.

A glider, being heavier than air, can be controlled and directed as no balloon can.

It is automatically released at a desired height, carrying the instruments down with it.

It then "homes" on a radio control to a chosen spot, bringing back instruments for further use and/or cosmic ray records for future study.

—H. C. McKay