

SCIENCE AIDS JET PILOTS.

At the R.A.F.'s Institute of Aviation Medicine at Farnborough, the first tests with a cockpit-whirling centrifuge are made ready for its human guinea pig. His heart and brain reactions to jet-style accelerations will be recorded electrically.

In the cabin-cockpit the guinea pig pilot will be whirled round by the centrifuge's 62 foot rotating arm while observers sit near the centre of the arm to watch his actions.

In an inflated gravity suit the pilot will be subjected to the actual strains of jet combat, but under controlled conditions.

Even the movements of the pilot's eyes will be recorded, by what is believed to be the most effective system in the world.

The centrifuge is spun by a 2,200 horse power motor. Gradually the forces greater than gravity, called "G" are built up. In jet combat it is changes in speed which create these forces: four "G" being enough to cause a "grey-out" six "G" causing a "black-out". Over six "G" the blood becomes so heavy the heart can no longer pump it to the brain and the airman becomes unconscious.

At five "G" this is what happens.

Heart-beat, brainwaves and blood pressure are recorded as the seconds of "greying-out" tick by.

Other guinea pigs react similarly:

Costing £350,000 the Centrifuge puts Britain well in the forefront of modern scientific attempts to safeguard airmen in this jet-age.