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THE HOW-TO-DO MAGAZINE



onquest of Space

ANTI-GRAVITY: Power of the Future

By G. Harry Stine Chief, Navy Range Operations White Sands Proving Grounds

THERE is a good chance that the rocket will be obsolete for space travel within 50 years. Some of us have been concentrating on the development of the rocket as the possible power plant for outer space propulsion. We've fired a lot of them and we've proved that they will work in outer space. We've also learned a lot about what's out there by using rockets. And probably we will take the first few faltering steps into space with rocket power plants.

But recent discoveries indicate that the spaceship of the future may be powered by anti-gravity devices. These, instead of using brute force to overcome gravity, will use the force of gravity itself much as an airplane uses the air to make it fly.

Sir William Crooks, the English scientist who developed the cathode-ray tube we now use for television, made extensive investigations of levitation phenomena—a field that once belonged to vaudeville magicians. Scientists, reasoning that if they believed his reports of weird green glows in

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An exciting article on the amazing spaceship that conquers gravity. In July MI, on sale June 21.

vacuum tubes they should also look into Crooks' levitation studies, have been making slow but steady progress. Others have been investigating the fields of gravitic isotopes, jet electron streams and the mechanics of the electron shells of atoms. Townsend T. Brown, an American investigator, has gone even further than that. There are rumors that Brown has developed a real anti-gravity machine. There are many firms working on the problems of anti-gravity—the Glenn L. Martin Co., Bell Aircraft, General Electric, Sperry-Rand Corp. and others.

Rumors have been circulating that scientists have built disc airfoils two feet in diameter incorporating a variation of the simple two-plate electrical condenser which, charged to a potential of 50,000 volts, has achieved a speed of 17 feet per second with a total energy input of 50 watts. A three-foot diameter disc airfoil charged to 150 kilovolts turned out such an amazing performance that the whole thing was immediately classified. Flame-jet generators, making use of the electrostatic charge discovered in rocket exhausts, have been developed which will supply charges up to 15 million volts.

Several important things have been discovered with regard to gravity propulsion. For one, the propulsive force doesn't act on only one part of the ship it is pushing; it acts on all parts within the gravity field created by the gravitic drive. It probably is not limited by the speed of light. Gravity-powered vehicles have apparently changed direction, accelerated rapidly at very high g's and stopped abruptly without any heavy stresses being experienced by the measuring devices aboard the vehicle and within the gravity-propulsion field. This control is done by changing the direction, intensity and polarity of the charge on the condenser plates of the drive unit, a fairly simple task for scientists.

Sounds incredible, doesn't it? But the information comes from reliable sources. are licking the problems of gravity. Indications are that we are on the verge of tapping a brand new group of electrical waves similar to radio waves which link electricity and gravity. Electronic engineers have taken the electrical coil and used it as the link between electricity and magnetism, thus giving us a science of electro-magnetics which in turn has given us such things as radio, television, radar and the like. Now, gravity researchers seem to think that the condenser will open up the science of electro-gravitics. Soon we may be able to eliminate gravity as a structural, aerodynamic and medical problem.

Although we will probably use rocket power to make our first explorations into space, the chances are now pretty good that this will not always be the case. In 50 years we may travel to the moon, the planets or even the stars propelled by the harnessed forces of gravity. If this seems fantastic, remember that the rocket and the idea of a trip to the moon was fantastic 20 years ago. Fifty years ago the idea of commercial air

travel was utter nonsense.

With gravitic spaceships, we may travel to the moon in less than an hour, to the planets in less than a day or to the stars themselves in a matter of months. We may be able to do it in absolute comfort without the problems of zero-gravity or high accelerations.

The idea of the rocket becoming obsolete is not a happy idea, particularly when so much work has been done on rockets. But we have worked on rockets because we believed they were the only type of power plant capable of working in outer space. If a better method comes along, why shed tears? After all, our basic goal is to travel and explore in space and it doesn't make much difference how we do it.

Invention Clinic

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nature of the electrolyte, the size of the metals, the distance of separation, polarization, temperature, and perhaps other factors. Next time you try this trick stick the coins in a lemon. Then try different coins or metals such as aluminum and gold. You should get a higher voltage.

Snatchproof Light And Socket

E. Boles of Amawalk, N. Y., has perfected an electric light socket and bulb. These are so much like the present types they will need to be marked to denote the difference. Once [Continued on page 25]



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