

Beenington's ability to sucowefully carry out her since you controlly converted to the conof enti-mubmarine warfare depends in large on two major of conoperations of one divinion. Air Department's V-2 Divinion. They are the two catapults and the arresting goar, the major in the arresting goar, the major in planes and to stop them safely once they return.

During a normal working day, 12 to 15 men man the arresting gear, with the wires catching approximately 30 to 45 planes a day. The amount of landings rise to 150 to 250 a day during

Six engines control the below decks pissons which in turn ornfrol the wires on the flight deck. The pistons, running athwartships, control the length of wire being let out. The ratio of the pistons is 1-24, so when the piston moves one inch, the cable on the flight deck moves out 14 inches.

Average landings on our flight deck are with planes

our ingat oeck are with planes weighing approximately 24,000 pounds coming in at 70 knots. The wire stope the plane within 110 to 120 feet.

The catapults are hydraul-

into outsputts are nyurautically operated, each one requiring 8,000 gallons of oil, and can send a plane off the flight deck at a speed of 105 knots in two seconds. At the end of the two second run, the pilot is being subjected to

four Gs.

The shuttles on the flight deck, at tracks have together made more than 2,000 trips to the box since we left long Beach, covering a distance on deck of more than 70 miles. Each one is connected to its below decks maddinery by cables that have a breaking strain of

fire again 33 seconds after it has launched a plane,

The machinery in each of the cat machinery rooms weighs a little more than 100 tons and consists in part of: two tow each of which is as long as the flight deck, the tow cables being 1% inches in diameter and the retract cables being 1% inches in dismeter: a huge hydraulic ram and piston that measure 18 inches in diameter; four small air bottles and one accumulator, plus smaller related machinery. The term tainers is more-or-less a figure of speech, because the walls of these short, fat obsects are seven inches thick and contain 4,000 pounds of air pressure per square inch and oil used for the cat shots.