## FLEET AIR ARM 1/6 NET THE ADMIRALTY ACCOUNT OF NAVAL AIR OPERATIONS



THE GREAT DAY. Landing on a carrier after shore training is finished is a great moment. The Deck-Landing Control Officer guides the Seafire pilot in with his "bats."

## 5. "THOSE IN WHOSE WORK THEY TRUST"

In H.M.S. Landrail, Peters, Oliver and Green learn for the first time the comradeship of an air squadron. They are no longer individuals but work as one company, each member of which is dependent on the other, and thus they come to understand that the best results are achieved not by the most efficient pilot, observer or air-gunner, but by the most efficient crew with good teamwork, and that a squadron commander can make a happy squadron as surely as an experienced commanding officer can make a happy ship, if he receives the support and co-operation of his men.

They also learn that every officer has his own part in the organization of the squadron. One—the senior pilot—is responsible for the

maintenance of the aircraft, others for personnel, stores, armament, wireless equipment and parachutes. A squadron officer acts as staff officer and the senior observer attends to the welfare of the air-gunners. Once again they come to appreciate the services of the Wrens, who pack the parachutes and aircraft dinghies, fit the wireless equipment into the aircraft, service the guns, help to provide met. reports and check the aircraft parts when the squadron moves from one station to another, besides driving transport vehicles, cooking, waiting at table and acting as officers' stewardesses.

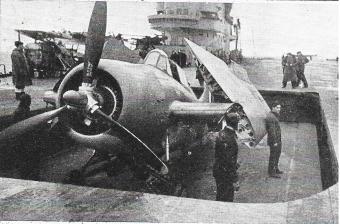
Flying together in the same Albacore the three friends practise mock torpedo and bombing attacks on targets at sea. Then the squadron may go to one of the Coastal Command stations for a short time as a "lodger unit" for minelaying, attacks on enemy shipping or anti-submarine work. The squadron has its own office and an allotted area in the station, the officers and ratings messing with the R.A.F. Relations between the two Services are excellent, and each learns to understand something of the other's work.

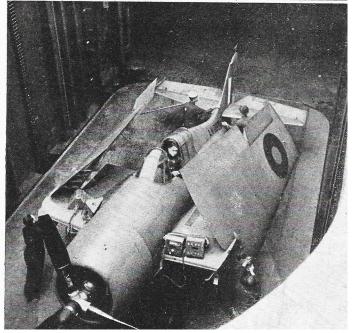
At last comes the day to which all the members of the squadron have been looking forward: they fly off to join an aircraft carrier. Peters' training in H.M.S. Peewit enables him to land his Albacore neatly on the flight-deck. The carrier spends some days exercising her aircraft in home waters, and it is not long before Peters and his companions become familiar with the procedure of flying at sea.

When the pipe for ranging aircraft is sounded over the ship's broadcaster the Albacores come up in the lift with wings still folded. The "pin-party" of seamen push them into position on the flight-deck and the maintenance crews spread the wings. Green, Oliver and Peters, wearing their "Mae Wests," climb into their places, and the squadron air mechanics help them into their harness. Peters starts up his engine. The Petty Officer in charge of the flight reports all correct to the Deck Officer, who gives the signal to the Commander (Flying). This officer, known as "Wings," is looking down on the flight-deck from his own bridge on the island, in close contact with the Captain, who is on the compass platform. The ship begins to turn into the wind. The Deck Officer brings the leading aircraft into

PERFECT LANDING. *Top.* The aircraft, this time a Martlet, is about to touch down on the rainswept deck, while an asbestos-clad fire-fighter stands at his post. *Centre.* With its wings folded back, the aircraft is struck down into the hangar. *Below.* Looking down into the lift shaft. The big wedges lying on the wings are the chocks used on deck to brake the aircraft's wheels until the signal "Chocks Away" is given and the aircraft takes off.







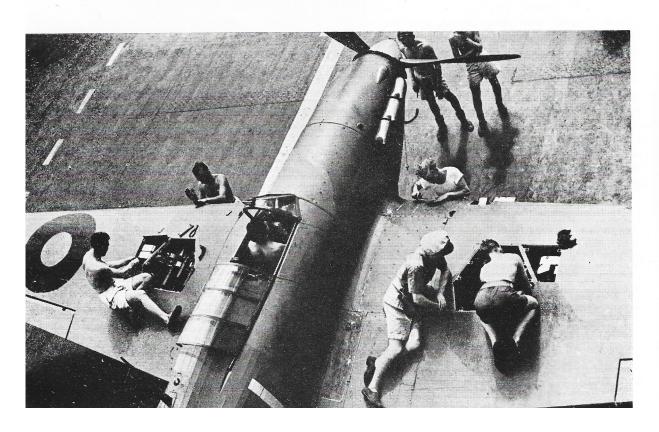
position for the take-off by signalling to the pilot with a pair of small coloured flags. As soon as it has taxied into position, the "stop" signal is given, and the ratings who are handling the chocks place them at the wheels to prevent the aircraft from moving.

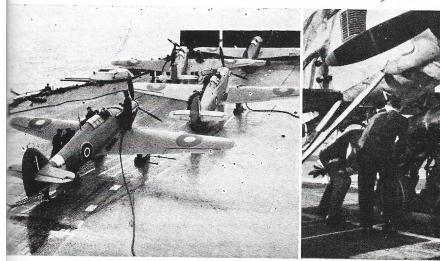
When the steam jet at the fore end of the flight-deck shows that the ship is steaming into the wind, Commander (Flying) shows a green flag, the executive signal for flying off. The Deck Officer signals "Chocks away." The leader takes off. When Peters' turn comes he holds the Albacore by the brakes until he sees the Deck Officer drop his green flag, and then flies off. The remainder of the flight follows at intervals of ten seconds and forms up on the bow of the ship.

Having taken part in an exercise with some of the carrier's fighters Peters receives a signal to return. The flight goes to the waiting position, a mile astern of the ship. The squadron distinguishing flag is shown at Number One port signal boom. The first sub-flight then closes the ship. Peters prepares for landing by lowering his hook, then circles

round the ship, awaiting his turn to approach the deck.

When Commander (Flying) is ready he orders the affirmative flag, a white cross on a red ground, to be hoisted at Number Two port boom. From now onwards Peters is under the orders of the Deck-Landing Officer, who brings him to the right height and speed over the after end of the flight-deck. Peters has "backed up" the aircraft ahead so that there will be no delay: a high rate of landing is necessary for the efficient operation of the ship, which in action might be in her most vulnerable position. When he receives the signal to come on he makes a straight approach, with plenty of engine, nose well up, the aircraft hanging on its propeller and sinking steadily towards the deck. As he comes down his hook catches one of the arrester-wires and the Albacore comes to rest. Ratings run out to disengage the hook, the safety barrier is lowered and Peters taxies forward; then the barrier is raised again for the next arrival, which touches down twenty seconds later. As Peters applies his brakes at





"TILL THE JOB'S DONE." These are some of the men whose trust it is to keep the aircraft in perfect flying and fighting order. *Below*, *left*, armourers at work on a Sea Hurricane's guns. *Above*, *left*, a group of Hurricanes is tuelled. *Right*, torpedomen.

the far end of the flight-deck the pin-party pounces on the Albacore, folds its wings, and parks it to await its turn to be struck down to the hangar, where it is tucked away with neatness and despatch, ready to be serviced by the squadron maintenance ratings.

In the days that follow, Peters and his comrades come to appreciate the work of these maintenance ratings as they never did ashore. There is a prayer used in the Fleet Air Arm which begins:

"Almighty God, Who makest the clouds Thy chariot and Who walkest upon the wings of the wind, we commend to Thy Fatherly protection all who ride the skies in the service of the Fleet, and those in whose work they trust."

The Fleet Air Arm is like an iceberg: the part seen rising to the sky is but a small proportion of the whole, and to maintain the pilots, observers and gunners in the air there is, working in the hangar below, a body of men upon whose skill and integrity the air crews' lives depend.

Among the senior rates are skilled An Artificers, and there are some Flight Sergeants

still on loan from the R.A.F., but many of the air fitters and most of the air mechanics began the war as civilians and are enlisted for hostilities only. These men now join at a New Entry Training Establishment in the Midlands, fitly styled H.M.S. Gosling. There they are kitted up and pass through a ten weeks' course which will fit them to defend their airfield or their ship, for the Navy requires that, besides being technicians, they shall also be combatants, like every rating. At the end of this course they go on with their technical training elsewhere.

In the Navy there are four categories of air fitter and air mechanic: (A), who are responsible for airframes and rigging, the general assembly workers, trained as sheet metal workers, welders and joiners; (E), the engine mechanics and machine operatives; (L), the electricians, in whose care are all the complicated electrical fittings of the modern aircraft, including the maintenance of the camera guns, and (O), the men who service the ordnance, or armament, of the aircraft, including all bombing equipment.

The air fitters are skilled tradesmen who

have had over two years' experience in the engineering industry before they join. They are accepted on passing a trade test and wear fore-and-aft rig-jacket and peaked cap. The air mechanics, who wear square rig, need not have any previous trade experience, which is considered less important than an aptitude for the work to which their natural ability can be harnessed. Among them are grocers and butchers, and recently a costing clerk, with no mechanical knowledge when he joined, passed out top of his course. While they are in H.M.S. Gosling every attempt is made to fit the right man into the category most suited to him, by means of psychological tests and also by the personal observation of his work.

Most air fitters and air mechanics go from H.M.S. Gosling to R.A.F. training establishments, where there are naval sections, with naval officers in charge. The men work beside the R.A.F. mechanics under training, and the instructors are R.A.F. non-commissioned officers. The naval ratings live in their own hutments, however, have their own band, and their section of the station may be recognized by the washing that is hanging out to dry, for while at H.M.S. Gosling they have been taught, as every seaman is, to wash their own clothes.

The remainder go to a naval air training establishment, known as H.M.S. Daedalus II, at a market town in the midst of the pottery country. It was originally situated at Lympne, but in May, 1940, was moved at short notice when the R.A.F. required the station after the collapse of France. The establishment, which is a triumph of ingenious administration, is dispersed in thirteen different buildings in the town.

After about six months' training here both fitters and mechanics qualify at a naval air station as competent to give a certificate of airworthiness for aircraft and then may be drafted to a carrier.

Radio mechanics, including Wrens, are trained to test, maintain and repair all the radio apparatus in naval aircraft. The

Navy has also begun to train a number of Wrens to relieve a proportion of the male air mechanics, (A), (E), (L) and (O), in shore-based squadrons at home and abroad. Their training is exactly similar to that of the men, and is carried out mainly at R.A.F. stations, although some go to H.M.S. Daedalus II, which is also responsible for the main instruction of the air apprentices, who are, in wartime, the only long-service maintenance personnel under training.

These boys, who are required to pass a preliminary examination, are called up from school after the age of fifteen. They are kitted up at an establishment (formerly a well-known preparatory school) near Lee-on-Solent. They spend three weeks on a course which includes drill, route marches, firing on the range, swimming, lectures on naval history, and visits to the workshops at Lee. Whenever possible they are taken for a flight.

They then pass on for a year's training in one of two preliminary training establishments, and go on for their special training in their own categories to H.M.S. Daedalus II, where they remain two years. They are grouped in four divisions, each with a Divisional Officer, a Chief Petty Officer, a Gunner's Mate (for drill) and P.T. instructors. The Chief Petty Officer is not an instructor but supervises their clothing and looks after their general welfare; the boys are encouraged to go to him with their sorrows and their jubilations. From the senior divisions C.P.O. and P.O. apprentices are appointed, receiving a small increment of pay and being given jobs which are equivalent to those of the Leading Seaman of a mess deck. They are, in fact, in the position of prefects, and the wise policy of the Navy is to give them as much responsibility as they can shoulder.

The apprentices live and work apart from the fitters and mechanics. They have their own canteen and gymnasium, which can be used as a cinema. Each boy knows that he has the right to put his case or to receive help, and he is trained to trust those who teach him. If he is slack at his work he receives a "Captain's warning," and his parents are informed. If he fails to improve he may be discharged, but only after Admiralty sanction has been obtained. No boy has ever been suspended for misbehaviour only. The Navy trains him to behave.

At the end of three years the apprentices have a final technical examination and a trade test, then go to Lee-on-Solent to be rated, and spend a further six months "under report" in the squadrons and workshops of a naval air station, including brief courses at makers' factories, to emerge after further operational experience at the age of 20—21 as qualified air artificers, the most highly trained technicians of the Fleet Air Arm.

The care that is being spent on these young men's training is only beginning to bear fruit. Meanwhile the Navy has cause to be grateful not only to the R.A.F. men on loan but also to its own air artificers, fitters and mechanics who have borne the burden of over three years of war.

The maintenance staff's duty in action at

sea is to get all the aircraft serviced and repaired as soon as possible, so that they may go into the sky again. Many has been the time when they have worked for three days and nights patching bullet holes, changing engines, and doing in a few hours jobs that might have taken a week ashore. As soon as an aircraft returns to the ship damaged, the staff of the carrier's workshop gets it down from the exposed flight-deck and sets to work on it within ten minutes of its having landed on. It may have had the propeller damaged, or it may need new wings, new wheels, patches on the fuselage or the planes-metal to be riveted in Fulmars and Martlets, fabric patches for Swordfish and Albacores. On one occasion a complete undercarriage was manufactured on board.

"The Fleet Air Arm never worry about the hours," said a maintenance rating in the Victorious after the Malta convoy of August, 1942. "They just work on till the job's done."

That is what their training teaches them to do, and such is the work of those in whom the air crews trust.



ALL CORRECT. This is the scene upon which the Commander (Flying) looks down from his bridge the scene up to which all the intensive training and practised teamwork of the Fleet Air Arm leads.