IN HONOUR OF THE RUSSIAN FALLEN In Stalingrad this temporary memorial has been erected to unknown Red Army soldiers who died in the fierce fighting for the city; a permanent monument will later take its place. In a recent statement, the Vice-President of the Academy of Architecture of the U.S.S.R. said that plans were being made to lay out the centre of the reconstructed city in broad squares, adorned with mighty monuments to the heroes of Stalingrad.
Our Roving Camera Looks at the Housing Problem

Caravans serve at least as a temporary measure to overcome the housing problem near Elterwater, on land which prior to the war was a holiday camp site. Some 200 caravans, which are either rented or self-owned, the inhabitants are service people, munitions workers and evacuees, whose children attend the village school. The community is self-contained, tidy and well-ordered; and (below), inside a caravan, where space is limited and domestic arrangements are simple; cooking is done individually on stoves with cylinder-cam-

Emergency houses to help immediate needs in post-war Britain were mentioned by Mr. Churchill in his broadcast on March 21, 1946. One of the prefabricated steel houses, of which it is hoped to build 50,000, has been erected in London (bottom left). The house has a type of two-storey, prefabricated house produced by a Hull firm (bottom right) was recently erected in just under nine hours. Workmen are seen laying the floors (centre right).
THE BATTLE FRONTS


The approach of the long awaited Second Front the atmosphere became almost unbearably tense by the beginning of May. Rumours and speculation filled the multitude of sources provided a variety of forecasts of its date, points of attack and methods that gave ample scope for choice. The odds were long, however, against any of them proving more than partially correct, but they served to indicate the difficulty the Germans would have in adjusting their dispositions to meet the threat without unduly dispersing their resources in an attempt to be strong everywhere. Personally, with so many possible permutations and combinations, including a number of unlikely ones, the Allies would be in a better position to start than to end—from Russian front, in Italy or in the Balkans?

RUSSIA

On the Russian front it seemed at any rate pretty certain that the front would not go as long as in 1943. Then, although mud brought operations to a standstill for a considerable time, the main reason for the prolongation of the mud was the exhaustion of both sides after the winter campaign and the necessity of carrying out an extensive reorganization before embarking on major operations again. This year the Russians show no sign of exhaustion and they have demonstrated their ability to maintain their offensive under most adverse ground conditions. North of the Priepet Marshes the front is probably—still to ground conditions which in the north are worse and persist longer than in the south, but south of the Marshes it may be no more an unusually long pause made desirable by the coincidence of essential reasons. The main reason I judge is that the offensive, having split the enemy's front, is now two distinct areas, which call for considerable regroupings, and are each launching major operations in divergent directions.

Secondly, the distance the offensive has already covered has immensely increased the length of lines of communication which almost certainly must require to be improved before such operations can be launched as a major offensive. A third reason is that the offensive is being made the objective in Poland and the objective in the lower Danube area has reached the Carpathians, which encroach on both lines of renewed operations, limiting their scope of manoeuvre. With the passes still blocked by snow, operations across the Carpathians on a major scale are presumably out of the question. But, perhaps more important, the melting of the snows has brought the Donietr, Fruth and Sereth temporarily down in flood which improves the German defensive position; and, where the foothills of the mountains encroach on the area of operations, tributaries in spate are a particularly serious obstacle. Comparatively small swift flowing torrents may often prove a greater obstacle to military operations than large rivers, if they are sudden and extreme fluctuation. On the whole, therefore, the current seasonal conditions tend to limit the scope of operations rather than to bring them entirely to a standstill. It can do in the north.

The unexpectedly rapid fall of Sevastopol on May 9 was a fitting climax to what I think was one of the most brilliant achieve-

ments of the Soviet military forces. The initial break-through into the Crimea was a masterpiece of plunging and execution, but the Sevastopol defences were so strong that it seemed probable that a prolonged siege might be necessary. That the Russians were able in three weeks to complete preparations for the final assault and to overwhelm the defense in three days' fighting was an amazing proof of their organizational and tactical ability.

BURMA

While the front continued in Europe more interest could be taken in Burma operations. In Burma the situation was certainly obscure and no statement that I can make must be broken—on Russian front, in Italy or in the Balkans?

FAR EAST

The progress of the air-sea offensive in the southwest Pacific (see map, p. 4), now far ahead of schedule, is very encouraging. It is clear that under the umbrella of carrier-borne aircraft amphibious operations can be carried out at a constantly increasing range. In an attempt to be strong everywhere the Japanese shore-based aircraft have to be distributed in such a way that detachments are liable to be overwhelmed by the surprise attacks of carrier-borne aircraft and long-range shore-based bombers, leaving detachments of ground troops such as that at Wewak without air support to be isolated or dealt with by landing parties in due course. Meanwhile the evident panic of our American and Australian operations carried out by Australian troops under a cover of carrier-based naval forces, while the climate which ended in the capture of Madang should not be forgotten or underrated.

FIELDMARSHAL KEESLING, German.
C.in.C. Southern Italy, whose troops our Fal's Army in Egypt is fighting as a field telegraphed (left) with him is Field. Marshal Air Force, Air Chief Marshal, relative of Germany's last war air ace.

RAILING TO TAKE KOHIMA, Allied bases in Assam, Japanese troops were, on May 11, just beginning to form their main assault on the Manipur State, where strong Allied forces barred their way. In Northern Burma, British and Indian troops were advancing in the Megung valley, air cover of the Three

our troops in the Imphal area and was attacking the small garrison at Kohima on its main line of communications where, in ordinary European warfare, have undoubtedly produced an alarming situation. It was difficult to realize that in Burma, although operations were conducted by fairly large forces of well-equipped troops, they had largely the character of guerrilla warfare, and only in the open Imphal plain could battles of a normal type develop.

There the isolated force had the advantage of superior armament owing to the inability of the Japanese to bring up large numbers of the more powerful weapons because of their indifferent communications, and once they emerged from the surrounding jungle their attacks were therefore practically bound to fail. Nor was the isolated force likely to suffer from lack of supplies, for its large reserve could be frequently supplemented by air transport.

The situation at Kohima was more serious, for there not only was the garrison very much smaller, but the Japanese were able to close in on it from the surrounding jungle. Only the very gallant defence of the garrison prevented a regrettable incident, damaging or destroying our prestige, and one which might have enabled the Japanese to infiltrate up to and interrupt the railway which provides the line of communication with General Stilwell's force in the north. It was only after a period of some anxiety that a relieving force broke through the blocks on the road, between Kohima and the Chinese border, to replace the original garrison by fresh troops.

There was a general counter-offensive against the Japanese detachments, dispersed and dug in over a wide area at inaccessible points in the jungle difficult to locate, was impracticable and counter-measures were performed of a guerrilla character. Carried out on an extensive scale by troops based on the railway and by the Imphal force they may have met with considerable success, disorganizing and inflicting heavy casualties on Japanese detachments. The Japanese are having difficulty in maintaining supplies; these difficulties will probably greatly increase in the monsoon season which has begun and they may compel the Japanese to withdraw.

Meanwhile General Stilwell's Chinese troops, covering the construction of the new road, which may one day link up with the old Burma Road, were highly successful, and the progress, and the main communications of the Japanese opposing them have also been defeated, by the Chindit airborne force which has established itself in the railway leading north from Mandalay. That force has been reinforced, but little information about its operations, and the strain of morale, has been given. Air communications with it during the monsoon obviously present difficulties, but apparently there is confidence that a technique has been developed which will overcome these. Japanese attacks on its central strongholds at Henu have all been driven off.
In New Guinea Another Japanese Base Falls

THREE-DAY AIR POUNDING of Japanese positions paved the way for the great Allied landings at Hollandia (Dutch New Guinea), Aitape, and Tanimbar islands (see pictures on page 2). Hollandia looks peaceful (1), but it is now the center of Allied military activity. Dutch civil authorities arrived there with the troops to handle the affairs of the first Dutch territory recaptured from the enemy. Dutch nationals, who had fled from the conquest of New Guinea by the Japanese in 1942, were welcomed home. Dutch military engineers and civilians were taken ashore by Allied troops (2). The Japanese were trapped in the hill country above the town (3). The first Allied troops were given a tumultuous welcome. The Japanese blockaded the town with headquaters in the 10th kilometer (4). Engineers and civilians were carried ashore (5). Dutch officials (6). At the enemy airfield at Hollandia (7), wrecked installations were seen (8). Wrecked Japanese aircraft were seen (9). Air attacks which preceded the landings.


PAGE 5
The War at Sea

by Francis E. McMurtrie

Primarily the invasion of Europe is a naval undertaking, based on Allied superiority at sea. Power no longer in hostile territory could be undertaken with such prospect of success in the absence of such superiority, since it would be liable to interception on passage, or to subsequent isolation from reinforcement in the event of naval support proving insufficient. It was sea power which enabled the successful landings in North Africa and Sicily, and at Salerno and Anzio, to be accomplished without serious loss or subsequent interruption.

A landing effected, the Navy has still to keep open the sea routes by which supplies and reinforcements of all kinds must be kept constantly flowing to sustain the invading armies.

An essential feature of a really successful invasion is some element of surprise. Hence the essential nature of preparations for the great expedition are surrounded. Travel to Ireland and elsewhere has been forbidden, and even the dispatch of diplomatic mail by neutral embassies and legations has been suspended to guard against the danger of warning being conveyed to the enemy.

For a considerable time past the Germans have been endeavouring by every possible device to discover not only the date when the invasion will begin, but also the points selected for the first landings. Though conditions of weather and tide must govern the former contingency, there is still a considerable period during which prospects should be favourable, and to narrow down the date to a definite few days would assist our foes immensely. Still more valuable it would be for them to make certain where the blow will fall, so that they might concentrate all their available force at the point of attack.

Actually there are so many possibilities that they are in danger of dissipating their resources in a vain endeavour to be strong everywhere.

Norway and Denmark Offer Attractions to Invader

Thus there has recently been a tendency to forecast an Allied stroke in Norway, where the harsh weather and German communications are extended across a stretch of sea where interception should not be difficult. In answer to the German demand to extract information concerning this possibility, neutral papers have been furnished with paragraphs, inspired from Berlin, to the effect that there have been troop concentrations in Iceland, from which the blow on Norway would be expected to come.

Again, the flat peninsula of Denmark, whose people have recently followed the example of the Norwegians in organizing a stubborn passive resistance to the Nazi domination of their country, offers certain attractive features to an invader. German occupation forces have therefore been strengthened and some of the more likely landing places barred by fortifications.

In the Netherlands, coastal areas have been threatened by destroyers and inadunate the greater part of the fertile fields of Holland with salt water on a large scale have been uttered. Furthermore, along the French coast, what has been variously termed the Atlantic Wall or Western Wall has been constructed. It consists of a series of fortifications, reminiscent to some extent of the Maginot Line, parallel to minefields both in coastal waters and along the shore, the whole of the minefields being made as a defensive line of mines which have been used successfully in the past by Allied armistice German landmine troops have now been reported and are made of non-magnetic material. It may be assumed, however, that the ingenuity of our experts will be equal to overcoming this artificial precaution.

There is, of course, no reason why the invasion should be confined to the Atlantic coasts held by the enemy. For this reason the inhabitants of certain parts of the Riviera have been compelled to evacuate their dwellings at short notice, in case a desertion should be made from Corsica and their assistance be invoked by the invaders.

All this shows how perplexed and worried the Germans must be, and how necessary it is that they should be prevented from ascertaining with any approach to certainty the plans which are now maturing for their discomfiture. It is always within the power of the Allies, owing to their superior sea power, to change the direction of the attack at the last moment: or several landings can be started, some of which may prove ultimately to be mere feints, designed to draw enemy strength in the wrong direction.

Land craft have been assembled in such numbers that it is probable there are few harbours around the British coasts facing the Continent without their quota of these specially designed vessels. American shipbuilding resources now underwrite the construction of such craft as a first priority, having as their target the provision of 80,000 of them. Already more than a fourth of this total is officially stated to have been delivered.

All these vessels will be under naval control, manned and commanded by personnel of the Royal or Allied Navies or of the Royal Marine. Fortunately, the exceptional qualifications of the latter corps for the conduct of amphibious operations are at last being adequately recognized.

There has been more activity in the Channel of late, as the lengthening days leave the enemy fewer hours of darkness within which to transfer supplies along the French coast by sea. A smart action on April 26 resulted in a German destroyer of 1,100 tons being sunk by four British destroyers of the "Tribal" type, supported by a new cruiser named Black Prince, whose commanding officer (Captain D. M. Lees, D.S.O., R.N.) was in charge of the whole operation.

Three of the destroyers in question were the Athabaskan, Haiga, and Huron, new vessels of close on 2,000 tons belonging to the Royal Canadian Navy. The fourth was the older destroyer Askanti, of 1,870 tons, a unit of the Royal Navy. Nothing has been said officially to indicate the class to which H.M.S. Black Prince belongs, but according to the Swedish Navy League Annual, "Marinakalender," she is of an improved Dido type. The official photograph reproduced in page 614, Vol. 7, showed just such a ship engaged in supporting the Antto landing.

In a second encounter three days later the Germans would seem to have laid a trap for the Canadians (see story in page 25). In pursuing enemy light forces towards the French coast, the Athabaskan was torpedoed by one of the small craft which are incorrectly referred to as E-boats, though the German name for them is 5-boats (Schlepperboote). They are actually equivalent to our own motor-torpedo boats. About 139 of her officers and men appear to have been rescued, though many of these are prisoners.

The enemy did not escape scathless, for one of their destroyers was driven on to a shoal, where her destruction was completed on May 7 by our motor-torpedo boats under Lt.-Cmdr. T. N. Cartwright, D.S.C., R.N.V.R.
H.M.S. Grenville Rams E-Boat in Midnight Battle

AFTER A FAST SEA CHASE off the Arctic beach-head at midnight on Mar. 26, 1944, the British destroyer, H.M.S. Grenville, rammed and sank a German E-boat which she had previously crippled by gunfire. Back in port gunners, who helped to stop the E-boat before it was rammed, load themselves for the Grenville's guns, in readiness, perhaps, for another victory of the same kind. H.M.S. Grenville replaces a destroyer of the same name which was sunk in the North Sea on Jan. 26, 1940.
How Glider Troops Went to Burma 'Broadway'

DARING PENETRATION behind the Japanese lines in Burma, 200 miles east of Imphal, by airborne troops commanded by the late Maj.-Gen. D. C. Wingate, was an operation that the British Airborne Force under Col. F. J. Cochran, U.S.A.A.F., on March 3, 1944. Two sites were selected for the landing, called "Broadway" and "Piccadilly." But as later reconnoissance showed Piccadilly to be unsuitable for a glider landing, the force went to Broadway, most arriving safely. To relieve congestion another airfield was constructed, and up to March 11 thousands of men, more than 500,000 lb. of stores, 1,180 mules and 172 ponies were landed by air.

Maj.-Gen. D. C. Wingate, D.S.O., (center), and Col. F. J. Cochran give British and U.S. flyers a final briefing (1). A mule is loaded aboard a transport plane (2). The glider force, lined up, tow ropes ready (3). A tow plane and glider pass over the Chin Hills on route to Broadway (4). Allied fighting men all round their glider, crashed on landing (5).
Precipitous Heights of the Imphal Road

ALONG STEEP TWISTING WAYS, such as this mountain road from Ukhrul to Imphal (capital of Manipur State in Assam on the borders of Burma) over which an Allied tank is seen advancing, British forces move also against the Japanese at Kohima, 87 miles from Imphal. Through some of the most difficult country in the world, overcoming immense physical obstacles, our 14th Army is pushing on. On May 8, 1944, the enemy was counter-attacking on the Ukhrul-Imphal road. See also map in p. 771, and illus. p. 773, Vol. 7.
Mighty is Canada's Help to the United Nations

Apart altogether from the epic story of her armed forces, the great Dominion of Canada's record of industrial and engineering triumphs, in furtherance of Allied needs and war aims, is one of the most marvelous. Facts substantiating that statement are here presented by HAROLD A. ALBERT, who has worked in close touch with the War-time Information Board in Ottawa.

From the Norman Oilfield near the Great Bear Lake to the Whitehorse railway goes the pipeline, on its way summarizing the 8,000-f. high Mackenzie Range. This map shows its situation and course to the distribution points, whence the oil travels westward to the Alaskan and southward to other centres. Output of Norman Wells exceeds 3,000 barrels a day. By courtesy of The Sphere.

Canada at war has expanded a 15-ship navy into a sea force of over 600 vessels and has become a naval power third in strength among the United Nations. Her anti-submarine craft have taken over half the burden of convoying merchant ships across the North Atlantic, and her repair yards, almost non-existent in 1939, have repaired more than 5,000 damaged merchant ships and serviced more than 5,000 naval vessels.

Her air force has a pre-war strength of 1,000, plus the R.C.A.F. which 58 fighter and bomber squadrons overseas, and for every Canadian in these squadrons there are 11 others R.C.A.F. crew members with the R.A.F. In addition, Canada has organized, trained and equipped from her own factories a fighting army of over 500,000 and has handled contracts for over 10,000 million dollars' worth of munitions. While this has been going on she has keyed her farm production to the highest point on record and has become a world trading nation second only to Britain and the U.S.A.

These facts are amazing. They serve to illuminate the striking energy and singleness of purpose which the Canadian people have shown, and to impress us with the fact that only 11,500,000 people in the entire Dominion—two or three million fewer than in Yugoslavia! Yet this is the Canadian miracle. They have the largest gun plant in the Empire, and its assembly line is turning out 25-pounders and other guns faster than the rival records established by Krupp in Germany or by the Soviets in Leningrad. Her small-arms production factories alone produce a million rounds a day. And her shipyards are equalling cargo ships at the rate of 20,000 a week.

These statistical highlights are outstanding in turn by the quiet feats that have been going on in Canada month by month since the outbreak of war. Among them are epis of engineering skill and ingenuity rivaling the greatest achievements in the history of man.

Early in 1941, for instance, the big aluminum smelting plants at Arvida, 130 miles south-east of Quebec, reached the peak of their power. New dams, barracading the flood waters of the Lake St. John area and yielding a hydro-electric output of 840,000 h.p., had already made Canada the world's third largest producer of aluminium. These fully tapped the available water power, but nearly double their power output was needed if Arvida was to meet the demands of Allied aircraft and armaments. The Canadian engineers were unperturbed. By the spring of 1942, 10,600 men drawn from all the eleven Provinces were working night and day in ten-hour shifts, lifting the Saguenay River, one of the deepest rivers in the world, from its valley bed and creating an artificial waterfall. Toiling in secrecy they have created within two years a bigger power development than Boulder Dam in the U.S.A. A few miles upstream from Arvida, the new Shipshaw Dam and power-station totals a 1,500,000 h.p. capacity, and Canada's aluminium output is now thought to surpass that of the entire pre-war world.

At Goose Bay, in the Newfoundland territory of Labrador, the building of the geometrically patterned with shining concrete runways, 6,000 feet long, designed to take the largest aircraft now in blueprint form. All around rise the warehouses, machine shops, oil reservoirs and buildings of a modern town, one of many to have shot up in the past five years in the northern wilderness. (See illustration, p. 88, Vol. 7, Highway 10.)

More recently, the R.C.A.F. construction men laid out an airport on a remote island beach off northern British Columbia. It fills a great need for land-based aircraft operating out of the North Pacific. It was designed by a team of R.C.A.F. construction men, under R.C.A.F. supervision, in cooperation with Norman Wells on the Mackenzie River. It was not built to order; the Norman Wells was divided from the Alaska Highway by some 550 miles of un-navigated territory, including the mountain ranges of the Yukon Divide. It was begun on the same basic principle that the Norman Field lay 1,500 miles north of a railroad and bordered from the sea by the ice barriers of the Arctic. The U.S. Corps of Engineers, the Royal Canadian Corps of Signals and 3,000 Canuck civilians joined hands in organizing a 1,500-mile road-and-river transport system up through Canada's northern interior, sailing tractors, jeeps, and fuel and cargo-laden barges, hauling tugs ashore and dragging them Ton lake to lake over 16-hour days and nights.

Seven crews were sent into the field to find a route across the ice and tundra of the Yukon hump. The seventh succeeded, and soon an oilplane began to ripple its way from Norman Wells to Whitehorse. Today it has been extended for 1,600 miles to the Alaska ports, and the output of the Norman Field, its limits still uncharted, is believed to exceed 3,000 barrels a day.

Starting with petroleum as the raw material, the manufacture of synthetic rubber in Canada was put in hand in 1942, when plans were made for a plant with a production capacity of over 30,000 tons a year. These are only a few of the miracles of Canada at war. Such achievements, by a pioneer nation in backing the words of their Minister of Finance: "We aim to make a reputation for Canadian achievement in a war that will be the talk of the world for generations, that will be the pride of our people; our children and our children's children."
THOUSANDS OF LOGS float outside this Ottawa sawmill (1) waiting to be converted for war purposes. At Shipshaw, in North Quebec, workmen are rushing to finish one of the world's greatest water-power projects; huge generators such as those (2) will get an extra 1,000,000 H.P. behind aluminium and aereoplane production. Millions of eggs are powdered for dispatch to Britain (3). Storage tanks (4) of the £20,000,000 Norman Wells oil scheme (see facing page).
Our Colonies in the War: No. 8—Sierra Leone

IMPORTANT HARBOUR is possessed by Freetown, capital of Sierra Leone, on the west coast of Africa. Ceded to Britain by the native chiefs in 1788, the colony, which now includes a large hinterland protectorate, is some 21,925 square miles in extent with a population of 1,768,000. Among Sierra Leone’s contributions to the war effort are diamonds, used in precision engineering, rubber, iron ore, and palm oil products.

Scenes in Freetown’s harbour (top left), and native market-place (top right); Atlantic anti-submarine patrols and convoy work are carried out by aircraft of the naval Commanding Officer, F. C. Oliver Folsey, O.B.E., R.N. (centre left), formerly responsible for all survey work and aircraft meetings on Imperial Airways routes from Southampton to Singapore.

Photos, British Official and Pictorial Press
Empire Premiers Tackle War and Peace Plans

Next stages in the war and organization of the peace to follow were points of discussion before the Empire Prime Ministers who came to Britain for the Conference which opened at 10 Downing Street, London, on May 1, 1943. From Canada, Australia, New Zealand, South Africa and Southern Rhodesia these stout-hearted leaders came, each cognizant of his own tremendous responsibility, soberly aware that on their united decisions largely rested the prospects of mankind. The last conference of Empire Premiers was held after the Coronation in 1937.

Mr. Churchill, who presided at the first meeting of this first wartime conference of Prime Ministers of the Commonwealth, is seen (left) with Mr. Curtin, Australia. Above Sir Godfrey Huggins, Southern Rhodesia. Below, at a dinner given by the King and Queen to the Premiers at Buckingham Palace, are, left to right: Mr. Fraser (New Zealand); Mr. Curtin (Australia); Mr. Churchill, H.M. the King; Mr. MacKenzie King (Canada); General Smuts (South Africa).

Page 13
Blockade-Running: Now a Desperate Axis Gambit

Increasingly urgent need of the enemy for certain war commodities is aggravated by Allied patrols patrolling the seas for blockade-runners and the ships and crews engaged in that lying gambale is presented here by CAPT. FRANK H. SHAW, Q.N., of first-hand knowledge of its hazards—for he also has "run" it. But while it is not possible for us to reveal the blockade-runner at its best—and worst.

ROYAL NAVY submarines ran the air-blockade of Malta and saved that island from total destruction and starvation. The petrol, ammunition and food carried there kept the R.A.F. in the air to beat off Axis bombers, the ammunition helped to shoot down such of the raiders as our Spitfires, Gladiators and Hurricanes missed, and the food mainained the stamina of the people of the George Cross Island.

Blockade-running is desperate work. Myself, I have run contract Ward of various bellicose states, mostly in a condition of revolution, for the Latin American countries, all in need of war-materials. The Axis powers are extremely anxious to get their hands on these.

Change war-essentials: raw products for finished fighting-tools. For that reason, German machine-tools reach Japan entail a very lengthy voyage which bristles with hazards, and whose ultimate goal is usually that Port. Missed shipping whenever the vessel returns. Probably seventy-five per cent of Axis contraband has been self-scuttled; most of the remainder have been sunk by Allied action.

Their existence has not been enlivened. With increasing air and sea-power the Allied watch on such sly merchants has become tactically unbroken. The widest detours are necessary to steam from the Western Pacific to the Eastern Atlantic, where it is understood that the Panama Canal, the Magellan Straits, and all other such cuts from Orient to Occident are under the closest surveillance. Petrol, materials for guns, or whatever, are few and scattered, and every port such as well known to the Allied sea and air sentinels. If a ship fills up with fuel-and storage for her crew's consumption to the extent necessary for what may be called her coastwise voyage or a twelve months voyage, valuable cargo-space is sacrificed. That means that only ships of considerable size are serviceable in the blockade-running game; and the bigger the ship, the more easy her detection.

There is also need for speed in times of crisis, which means very powerful engines and boilers, occupying much space. Since Axis blockade-runners are all more or less heavily armed large crews are needed, not only to man the ship, but also to handle the guns in case of emergency, as there is a ninety per cent chance of such occurrence. During years of solitary voyaging, of long periods of hiding in lonely bays, remote from the normal sea-routes, of incredibly wide detours, a lot of food and water are consumed. But certain commodities, such as rubber, aluminium and wolfram are vitally necessary to the production of munition. And the need for these, and the quantities have the value the Axis considers such risks and privations as are necessary.

Normally, a runner steaming from Japan to Germany would go down the Pacific almost to the fringe of the Antarctic ice, the thick, stormy weather serving as a shroud to her movements. She could then steer either east towards Cape Horn or west towards Good Hope. The latter route would be the more dangerous, because of the regular sea-watch maintained by the South African Air Force, which runs systematic patrols over a wide area of ocean, and the South Atlantic squadron of the Allied navies. The coasts of Tierra del Fuego and the south Argentine, however, afford many opportunities for hiding; and the Argentine has shown itself friendly disposed towards the Axis.

Still, the great oceans are wide; and if we can see the ships and guard at present in Allied possession we could not halting-place for the runner to rest and refit in readiness for the hazardous skelter to Biscay. Now there is no shelter to be found at Dakar—only long-range air-patrols, with light, fast naval surface ships to carry out unbroken policing.

The acquisition of bases in the Azores has helped the Allies to fine-come every degree of that of the runners must pass if they are to reach ports. And this stretch of sea is almost phenomenally clear of cloud and fog. The atmosphere is then transparent all the whole world, and the waters are aglow by night with glittering phosphorescence, so that the Axis undersea craft may instantly be detected from the air. Also, the Azores are in the path of transatlantic craft, and they are just as likely to be used as a jumping-off place—always in the path of air attack, although this has been frequently done with very little result. The patrol above can call upon naval vessels to complete the victory, well knowing that their superior speed in a sea where no hiding-place is available will enable the Navy to intercept or overtake the fugitive and compel either its surrender or its scuttling.

Life for the crews of such ships is appallingly monotonous, the only constant thing being fear of detection and destruction. In the narrow limits of such a large ship, with nothing whatever to relieve the boredom, men grow mentally and physically unbalanced. Food is usually scarce and badly cooked. The wireless picks up Allied news-bulletins of the events of increasing victory—if the Gestapo agents aboard each blockade-runner permit such news to be received and passed on to the crew. The discipline aboard such blockade-runners must necessarily be tyrannically severe, for the slightest laxity is apt to precipitate trouble that is likely to end the career of the Wireless operator. It is this form of discipline that makes the Axis blockade such a nightmare to crews.

Humane nature can stand just so much. How many cases have occurred of crews overpowering their officers and surrendering the vessel to Allied patrols will not be made public until the need for secrecy is past. But the trend is more usually the capturing of an Allied patrol, the headlong chase, and then the challenging fire that tells the operators in the grim dramas that the game is up. Escape is hopeless. There are few, if any, large surface ships in the open sea to provide a formidable escort. Whether it be a long-range Sunderland drooping mines, or a warship bracketing with heavy shell, Nemesis overtakes the worn-out enemy crew.

A U-boat, a complicated mass of internal machinery, has little spare space for cargo. Aircraft cannot carry sufficient fuel to justify their use against Allied air-power. And to ensure that the U-boats are not disabled by the Allied power, it is practically a fatal weapon. In spite of Hitler's so-called U-boat blockade, 99 per cent of our surface ships now get through, as compared with one per cent success of the Axis.
Along the Battlelines with Russia's War Artists

Wide encouragement is given to artists in the Republics of the Soviet Union. The Red Army has its own studio and employs artists specifically to paint battle scenes. Others dispose of their pictures in the socialist market or through a co-operative. The same economic laws apply as to other workers, many artists working in their own studios, while others join large studios run by the State. The cream of artistic production during the first 18 months of war was recently displayed at the Great Patriotic War Exhibition held at the Moscow Tretyakov Gallery, the collection later going on tour. Representative examples, notable for imaginative conception and vigorous execution, are given in these pages.

EXPLOIT OF TWENTY-EIGHT GUARDSMEN OF THE PANFILOV DIVISION

D. Meshalkin
Psychology and the Soldier

Mr. Copeland says he is interested in psychology. Of course he is, or he wouldn’t have written this book. What he means is that he enjoys studying human nature. As a psychologist in the technical sense he is not very acute. He says, for instance, that there are 70 or 80 different types of behavior in every group of men, either that of “the clean, alert, cheerful, honest, virtuous and clever, or that of the dirty, lazy, dishonest, vicious and stupid.” There speaks the penchant rather than the scientific investigation. He seems to have noticed that often the dishonest men are the cleanest and sometimes the most cheerful, that the clever ones may be lazy or the dirty ones virtuous in a conventional way.

However, for practical purposes this accurate-minded, kindly padre knows quite enough about the behaviour of men and the reasons for it to make him a useful guide. He knows that discipline need not be compulsion. Discipline is aimed at keeping people in order. But “a good disciplinarian can influence a group of people to keep themselves in line while he knows too that while discipline is more necessary to the soldier (a fighting man generally) than to anyone else in the world, ‘there is a vast difference between the discipline which restricts and irritates and the discipline which exists as a useful incentive.’

Importance of the Personal Touch

Here is a less obvious piece of advice. “Always call men by their names. When we call a man by his name we give him an identity. He is no longer a man in the crowd, but an individual. We have given him a sense of importance and a feeling of confidence and respect.” The story is told of Lord Roberts riding beside a column of tired troops on the march and asking, “Who is that man—and that another and that?” and then speaking to them, using their names, encouraging them with little personal touches. He made them feel that they knew them personally.

“They were good for another ten miles.”

Another story is quoted of how the how a glint of fun will sometimes do what no exhortation or exhortation can effect. A Dragoon Guards major was marching with a group of stragglers who were exhausted. He found them listless, apparently too weak to move. They sat and lay in the square of a small French town. He was puzzled. He had to find a way to rouse them. He gave the order to play the trumpet. He went in, bought a pipe and handed it to the drummer with him. “You can play The British Grenadiers?” he asked. “Right. Then take this whistle and play it. I’ll play the drum.”

They went round the square, playing for all they were worth. The tired men looked up, light came into their eyes, their lips opened in smiles, they stirred, they looked round to see what the row was about. Then they broke into a roar of laughter and scrambled up and followed. Not a man was left behind.

Mr. Copeland, in his book’s saying, “Moral force in war is worth three times the physical or the moral force,” and he thinks Napoleon might have said more than three times. But he might have said a great deal more. Moral force in this connexion does not mean that the army is not physically fit. He believes that is in sure to win. That would be a very minor doctrine, as harmful as that which Mr. Copeland enforces when he insists that we constantly repeat, “Thou art the Lord our God and we are Thy people,” the British Empire is bound to triumph.

Many armies have fought in good causes, many which have believed they were the Lord’s people have been utterly defeated. The Boers in South Africa believed it; what higher principle had we to fight for? But we best them. The French thought they had a sacred principle, and were enthusiastic for it. But the Russians won because they were better equipped and led and had larger forces. Leadership is of special interest just now. It may turn the scale in theatres of war where forces seem equally matched. In Montgomery we have a powerful exponent of the classic genre. I would endorse all this book says about establishing close relations between officers and men. That is the basis of the trust and devotion of the 8th Army.
A New Stalingrad Rises from the Ashes of War

CITY OF HEROES, Stalingrad slowly cast the Nazi onslaught of September 1942, and in the subsequent prolonged and bitter fighting was all but razed to the ground. The enemy succeeded in occupying the greater part of the city; then came the Soviet counter-attack, a massive assault by the 60th Army and culminated in the city’s relief on Feb. 2, 1943. Today the resurrected town begins to assume a forefront place in the resurrected life of freed Russia. The once-dead Volga waterfront grows busy again (15); the archway marks the front of Blom, Cherven’s plant, where the last remaining German invaders were exterminated; a wall plaque commemorates the Red Army’s deeds; alongside it a poster announces a football match in the plant’s stadium (14). A girl and boy, recently released from the camp, learned to handle the trowel, help to rebuild the city; other citizens work with a will in a once-battered street (4). See story in p. 25. Photo Exclusive to This War Illustrated PAGE 70
Red Marine Commandos Raid the Crimea Coast

STRIKING SWIFTLY and often during the battle for the Crimea—which on May 8, 1944, came to an end with the storming and capture of Sevastopol, last German hold on the Peninsula—marines of the Soviet Black Sea Fleet have made seaborne commando raids to wipe out Nazi aid to the German land forces, greatly aiding the triumphal progress of the main Russian forces (see map in p. 779, Vol. 7). The motor boats of the Soviet Black Sea Fleet with a landing party of marines start off on a coastal raid (1). Undetected, they reach the beach; armed with automatic weapons and grenades, and hauling behind them a heavy wheeled truck, they advance across the beach and inland, pausing to observe when danger threatens (2). Their objective reached—an inhabited place held by the Germans—the marines take up fighting positions and turn their full fire-power on the surprised enemy.
Hounds of War Now Go to Training School

WAKE up, you! One of the dogs has gone sick, and you've got to take his place!" is the caption to a new Arny cartoon unofficially issued at an important Air Service Command post where dogs are used as guards, each dog releasing three men for more important duties.

The U.S. Eighth Air Force headquarters started the scheme some months ago in England when they opened a dog-guard training school. Men from all parts of the country were sent there to learn to handle the animals and train them for their war duties. Men and dogs are trained as a team, so that when they complete their term at the school they virtually "talk the same language." Some of these massive dogs are killers, and it is fascinating to see how implicitly they obey their masters.

It is a staff course for the dogs. They are taught discipline, how to manage a stranger, how to keep him in captivity, and how to trail and pick up scents at prescribed distances. Dogs are assigned to a post just as an ordinary soldier would be, and incidentally they don't grouse about their guard duties, but take a pride in their work. All the men at the training school tell me that the U.S. Army has found that if dogs are trained properly they are invaluable as sentries on the battlefields. They can be trained to pick up scents which would be lost to a human being.

Each of these sentry dogs is in charge of a German N.C.O. detailed for its training. It is drilled to run to its master, who would be on sentry-go near by, to give warning of suspicious noises out at sea. The Germans believe that their "Ahitan Guard," with their acute sense of hearing, can pick up sounds that would fail to register on the most sensitive sound-detection apparatus. They claim that their most skillfully trained killer-dogs can detect even a carefully-propelled rowing boat when still a considerable distance off shore.

It is even reported that as a result of encounters with dogs, many Commandos have had their knives on the left hip instead of on the right. The reason is that Commando soldiers, instinctively raising their right arms to keep the dogs at bay, lost a split-second vital in getting the knives in the right-hand position.

One of the advantages of the Ahitan type for this work is, although they have good natural "guard" properties they do not willingly obey more than one master.

Thus each dog has to be under the command of one sentry with whom it has been trained possibly for several weeks. In Australia the experiment is being tried of dogs with radio control, and the first tests have shown that the scheme may be of use in jungle warfare where dogs are used to follow a scent. A midge short-wave radio set is strapped on a harness worn by the dog, or carried on a stout collar; it works from dry batteries, and will receive for about 60 hours after new batteries are fitted. The set is flint tuned and gave good quality—so that a dog, hearing the midget loudspeaker behind his ear, at once recognizes his master's voice.

Wires this radio control, a man can call on or call off several dogs at once. As all the receivers will be tuned to one frequency the radio control does not upset any other form of radio transmission used. In training, gramophone records of the "master's" voice are used, while he stands near the dog and alternately shouts real words of command. After about a week the dogs accept the loud-speaker as a real "voice," and the radio control works quite well even though the master at the microphone may be several miles away.

FOUR-FOOTED FORCES are in training at special schools for war dogs in Britain. Thousands have already completed their course and will carry out patrol work, guard munitions dumps and Army headquarters and the other posts. Above, A.T.S. kennel-maid groomed Ahitan at base, a war dog receives first aid. See facing page.
Man's Best Friend Helps Him Fight the Enemy

RADIO GUIDES THE ACTIONS of this white Alsatian (1), which has been trained to obey words of command (from its concealed master) transmitted through the small wireless receiving set strapped to its body. The set (2) is sufficiently powerful for the voice to be heard clearly. U.S. Marines use scenting dogs to track down Japanese snipers in Pacific island jungles. The war-dog acts as sentry on a R.A.F. airfield (3), while another has a message for delivery placed in its collar (4).
TINY BUT DEADLY ENEMY our troops overseas have to contend with is the malarial mosquito. In Italy the Pontine Marshes around the Anzio area formerly were the worst malarial plague spots, and to safeguard men of the 5th Army against the pests breeding there, every device and precaution is being adopted. Schools have been established, where all ranks receive instruction, methods of exterminating the mosquito larvae (or "grubs") which abound in stagnant water. Signs everywhere warn of the danger (1); only the blood-suck- ing female mosquito is the germ carrier, the male feeding on vegetable juices. Spraying still water with oil in order to suffocate the larvae which emerge from the water, sulphur dust and thousands of mosquitoes lie dead after this treatment has been applied to a water-logged shell-hole (2). Men on night guard are protected against bites by face veils and "guardens" (3). A series of lectures on anti-malarial precautions is being administered during the

 PAGE 24  Photos, British Official
I WAS THERE!  

We Knew Our Sister Ship Would Sail No More

Two recent actions of the Ushant shore were notable as being the first naval actions which ships of the Royal Canadian Navy have ever fought.

This account of the passing of the gallant Athabaskan, set adrift and torpeded on April 29, 1944, is by a naval correspondent who was aboard H.M.C.S. Halifax.

We heard the cry, "Athabaskan has been hit!" and as we turned to look at her we saw flames enveloping her superstructure. The action had hardly commenced. Two Canadian Tribal destroyers had directed two enemy destroyers of the Elbing class close in on the French coast, and suspected others nearby, and immediately closed to engage. Athabaskan (Lieut.-Cdr. J. H. Stubbs, D.S.O., R.C.N.) fired first. A stream of flame was directed by the two destroyers in the stern of Haida (Commander H. G. DeWolf, R.C.N.) and only a few cables distance.

Our guns opened immediately after, and under the spread of starshell we sighted the enemy ships, two of them, racing along the coast. They attempted to repeat the tactics of two nights previously, when we had sunk one and damaged three of their destroyers. They were making smoke and hoping to get away under cover of it. The action blazed furiously, and it was just after the first few salvos had been fired that Athabaskan was hit. It was a busy, staffed night, about an hour and three-quarters before dawn.

We saw the flames spreading over Athabaskan but she steamed on, her guns thundering. Enemy starshell was all about us at the time, and shells were splashing against enemy surface fighting ships. Another shell seemed to strike Athabaskan all, and she slowed down.

Axial-Crater line along the French coast, M.C.S. Halifax, her guns repeating their fine performance of two nights previously, hammered the enemy ships, while Cdr. DeWolf ordered a smoke screen to shroud Athabaskan, meanwhile maintaining the engagement. Hits were observed and a small fire broke out in the leading enemy destroyer and then, as we concentrated on the nearest one, we saw our salvos strike home and flames appear through the smoke screen.

It was about this time that a sudden explosion made us realize that Athabaskan had reached the end. We saw a burst of flame and smoke, and the ship would sail no more. The odds were now more than two to one against the ship, but Cdr. DeWolf continued directing the engagement. Another salvo and another struck the enemy ship, and we watched. We were obvious that both enemy ships were confused. The burning one opened a vicious fire in the direction of the other, mistaking her apparently for us as she fled. As our target appeared to go astern, we closed, panning her as we came in, only to realign, as we saw the trucks, that she had been driven ahore out of control.

Hawks and her crew were able to make their way to where we had last seen Athabaskan. Frightened lights appeared on the horizon as we closed the area, lights from the new type R.K. lumber. No. 10 light, to where the lights were thickened. Cdr. DeWolf and Haida and ordered all life lines over and all boats lowered. The sea was covered with thick heavy fuel oil from Athabaskan's tanks. Those of Haida's crew who could be spared from the guns lined the rail, shouting encouragement to those in the water. "Come on, boys, this is Halifax!" they cried, and the survivors shouted back and blew whistles. They were covered with oil, and they stopped in our boats as we helped them over the side. Several of Haida's crew, including Mr. L. Jones, the Gunner (T), and Lieut. John Coates, R.C.N.V.R., went down the nets, accompanied by several Haida ratings, to help the survivors on board.

Up on the bridge the Captain, Cdr. DeWolf, leaned over and encouraged the swimmers steadily. "Come on, chaps, swim in to the ship's side!" he told them, and the survivors did so. One survivor coming in looked up and grinned. "Good old Haida," he said, "you've beat us up again," referring to the Elbing destroyer which Haida had intercepted and sunk in the previous fight two nights before. "We got the one that got you!" the Haida boys told him cheerfully.

Bulldozing With the 5th Army at Anzio

Despite the fact that it lacks the glamour attached to many other military activities, Royal Engineers who drive bulldozers are praised for the work they do, which is, mainly, to construct roads and blast away obstacles. Engineers have been made responsible for the waterproofing of these machines, so that they are capable of operating under water.

Sapper Griffths, of Doncaster, commonly known as "Diablo" to the Italians, has been in the many landings in this theatre of war. He has had some interesting adventures, including being snared on his mighty "steed" by President Roosevelt's personal photographer. In Griffths' view, mines are the greatest danger the bulldozers meet, but the drivers are comparatively safe from the bombs falling from the sky. They are protected by a breast of steel between them and the explosion. During the Anzio landing his machine was hit a number of times by small-arms fire, but this did not affect the mechanical efficiency of the great caterpillar.

While advancing in Sicily he worked beyond the infantry. He told me: "I had been making a diversion across a large village, clearing away the rubble and generally making a road. When returning down a road to my bivy an infantry officer told me to get out of my cowl. I discovered he intended to capture the village I had just left!"

Many instances have occurred where, during the demolition of buildings, search has revealed a cellar to be full of liquor. The most notable occasion was when enough lager was found for a regiment; the point about this incident is that no one was not bothered to see if there was a cellar into which the bulldozer might go tumbling! Celebrating with the same golden liquor, the boys were suddenly told to shut up and prepared to be sent to the vicinity of the garden a German patrol was overlooking—evidently in search of the liquid that was cooling-off their Tommies' patched throats.
BULDOZERS HAVE PROVED INVALUABLE to the allies in the speedy preparation of roads and airfields and in the multifarious other construction jobs which mobile warfare entails. Here one of these highly efficient mechanical monsters is seen clearing a debris-blocked street in the Italian port of Anzio. The useful work performed by bulldozers in this beach-head area is described in this and the preceding pages.

We Dropped Supplies to the Troops in Burma

When the signal bell rings, these men of a supply-carrying aircraft in Burma will push overboard the bulky packages of food, clothing, and medicines as is told in the eyewitness account.

For Stalingrad’s Citizens a New Era Dawns

Woe to see the gift sword sent by King George Vi to Stalingrad’s defenders. The King’s gift is displayed in a special room, where there is always a guard of honour. Scores of people come to see it every day—not only Stalingrad people, but visitors who have arrived from all parts of the U.S.S.R. to pay homage to the city of world renown.

Pigalev, chairman of the City Soviet, showed me the King’s gift. I read over and over again the inscription to the steel-hearted citizens, engraved in English and Russian on the blade. Pigalev remarked, page 26

radio message ordered us to land at a forward airstrip, to fly six urgent casualty cases back to base. We set course south, escorted by Hurricanes, two flying close in to ward off any possible hit-and-run attack, while the four others criss-crossed in and out of the clouds, searching for enemy fighters which might have looked on “P for Peter” as easy meat.

Below, we saw the landing strip, deserted save for its small windsock hugging from a bamboo pole. We touched down to pick up our cargo, and left the Hurricanes patrolling the sky. Eight stretcher cases came aboard, mostly Gurkhas, but there was one British soldier among them, a private from Tushhill, Monmouthshire.

I asked him what had happened. He pointed south, where smoke from mortar fire and shells showed as they burst in the sky. “We ran into a machine-gun burst,” he said. “We were accompanied by Gurkhas, and trying to edge round a Japanese copse (a small concentration, heavily armed with machine-guns). Johnny Jap must have seen us as we were coming through the trees, and they outnumbered us four to one. The scrap didn’t last long, and when it was over the stretcher-bearers came out to help get back the wounded. We were sneaking back, when the Japanese opened fire and many of the stretcher cases already wounded were cut down, along with the orderlies.” He swore vehemently.

When all our patients had been made comfortable, we took off and rejoined the waiting fighter escort, to set course for base, where ambulances were, ready to rush the wounded to hospital.
MORE AND MORE MATERIALS for the reconstruction of the hver city of Stalingrad pour in daily, to be handled without delay by men and women industrial workers and technicians. 225,000 houses and 150,000 other buildings were wrecked in the winter battles there today. Of the military and civilians who have been forced to live in bombproof shelters, 90% are made of boxes, crates. 1943 over 1,000 houses as well as over 10,000 cottages have been built, and more than 100,000 people have moved from the tents, cellars and dugouts where they had been forced to live before the war.

40 miles from the city, the new houses are being completed by the men and women industrial workers and technicians. 225,000 houses and 150,000 other buildings were wrecked in the winter battles there today. Of the military and civilians who have been forced to live in bombproof shelters, 90% are made of boxes, crates. 1943 over 1,000 houses as well as over 10,000 cottages have been built, and more than 100,000 people have moved from the tents, cellars and dugouts where they had been forced to live before the war.

The City Soviet plans to spend over 37 million rubles on dwelling houses during 1944. The Dramatic Theatre and the Summer Theatre are being restored. Five cinemas were opened last year. Several more are already ready. There is a fair prospect that many clubs and other cultural institutions will be reopened shortly.

76 million rubles are being spent on the restoration and extension of the tramways, the water supply, drainage system, shopping centres, public baths and other municipal services. Stalingrad expects to break the back of this part of the job by 1943.

Our DIARY OF THE WAR

**APRIL 28, Wednesday**

**1:40th day**

Australia—Australians, W. of Plou- 

guy in New Guinea, occupied by Aus-

ducals.

Sea—British action off Brest, German 

destroyer sunk by new cruiser H.M.S. 

-1942.

Air—U.S. aircraft bombed Brunswick 

without loss. At night Bomber Com-

mand sent over 1,000 aircraft to France 

and Switzerland.

**APRIL 29, Thursday**

**1:45th day**

Russian Front—Soviet bombers 

made raids on Leningrad.

Mediterraean—Announced that 

German Gen. Kreugs had been captured 

by British and Free French troops.

Air—U.S. aircraft attacked Pas de 

Calais and caly, yards in Belgium and 

N. France. R.A.F. dropped 2,000 round 

of bombs by night on factories and 

rail yards in France and Belgium.

**APRIL 30, Friday**

**2:00th day**

Mediterranean—Genoa and Naples 

still held by Axis forces.

China—Announced that Chongqing, 

House, left to Japan on April 22.

Air—Airfields and military installa-

tions in France bomb by U.S. aircraft.

Air—Airfields as an orchard by R.A.F.

**APRIL 30, Saturday**

**2:30th day**

Mediterranean—Day and night raids 

on Toulon, Genoa, Savona and Leghorn.

Pacific—U.S. carrier-based aircraft 

bombed islands in Tiu. 120 bombs 

destroyed on the ground and in the air.

Sea—In action in English Channel 

Canadian destroyers Haida and Atha-

ton captured enemy destroyer. U.S.

destroyers sank German cruiser in 

Bengal. Allied planes shot down 

enemy bomber. See also June 1.

Japan—Japanese islands near Truk 

again struck from seas and air; Liber-

ators bomb Wake island.

**AIR**

Air—U.S. bombers attacked aero-

drome and railway yards in France by 

day. R.A.F. bombed ammunition dump 

in Mediterranean and railway yards at 

Archangelsk.

**MAY 1, Monday**

**2:36th day**

Russian Front—Soviet bombers 

made raid on Leningrad.

Mediterranean—Announced that 

German Gen. Kreugs had been captured 

by British and Free French troops.

Air—U.S. aircraft attacked Pas de 

Calais and caly, yards in Belgium and 

N. France. R.A.F. dropped 2,000 round 

of bombs by night on factories and 

rail yards in France and Belgium.

**MAY 2, Tuesday**

**2:26th day**

Russian Front—Soviet aircraft made 

day and night attacks on aerodromes and 

railways in Leningrad, Smolensk, Soviet 

and Lithuania.

Mediterranean—Allied bombers 

struck at Spa, 94, yards at Florence and 

rly. bridge at Sopdas.

Air—U.S. bombers attacked Pas du 

Calais and railway centre in France and 

Belgium. Leverkusen, near Cologne, and 

railway yards at Archangelsk. 

bombed by Mosquitos at night.

AIR—U.S. bombers attacked aero-

drome and railway yards in France by 

day. R.A.F. bombed ammunition dump 

in Mediterranean and railway yards at 

Archangelsk.

**MAY 3, Wednesday**

**2:53th day**

Mediterranean—-Sub-pent railway 

yards bombarded at night by R.A.F.

Sea—Submarine H.M.S. Somerset 

announced evaded and presumed lost.

**MAY 6, Friday**

**3:06th day**

R.A.F. dive-bombers attacked 

Dagupan in Adelic sector of front.

Mediterranean—-Day and night air-

attacks by Allied bombers on Russian 

targets, including Florence, Campina 

and Tottu-Severn.

**FLASHBACKS**

**1943**

May 3. Landings of Polish troops in 

Norway announced.

May 5 Norwegian Ministers arrived 

in London.

May 26. Bombardment of parachutists 

Cathorin. 

Soviet railways occupied attacked 

Dessie in Abyssinia.

April 29. Germans under Rammel 

captured Salom.

May 6. Stalin became Premier in 

place of Molotov.

**1942**

April 29. Japanese took Lashio 

(Burma) by mass assault.

May 1. Second "Bonedar" raid 

by the Luftaffe to Esterre.

May 8. Japanese aircraft's bomb 

Chittagong in Bengal.

May 1. Japanese raided Darwin 

in Northern Australia.

May 7. Ports of Timur and Bireza 

captured by Allies.

**1941**

May 3. Landing of Polish troops in 

Norway announced.

May 5. Norwegian Ministers arrived 

in London.

April 26. Bombardment of parachutists 

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Soviet railways occupied attacked 

Dessie in Abyssinia.

April 29. Germans under Rammel 

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May 6. Stalin became Premier in 

place of Molotov.
"S" FOR SUGAR, veteran Lancaster of Bomber Command, recently completed her 100th operation from her British base. R.A.F. maintenance staff were preparing her for a sortie when this photograph was taken. It is the third base in which she has lived and her 14,000-hour service, including a 1,000-pounder and 750-pounder. Now with her Australian equipment, "S" for Sugar took part in 36 sorties with the 50th Pathfinder Force and has been crossing enemy territory for two years, during which time she has dropped 1,250,000 lb. of bombs and used 15,000 gallons of petrol doing it. Grim reminder of the beefy marks made by Flak-Hit Mackay Service are the bullet holes on the many trips; also painted there are the B.E.E. and two B.E.C.s won by previous captains.

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Photo, J.F.V.
THE WAR IN THE AIR

by Capt. Norman Macmillan, M.C., A.F.C.

Europe is the focal centre of the United Nations' air strength. In the United Kingdom is a great array of air power—Bomber Command, Air Defence of Great Britain, No. 2 Tactical Air Force, and Coastal Command U.K., together with the U.S. Army 8th and 9th Air Forces. In the Mediterranean there are the Mediterranean Command of the R.A.F. and the U.S. Army 12th and 15th Air Forces, called the Mediterranean Allied Air Force. In Eastern Europe is the Red Air Force. And at sea there is the British Fleet Air Arm which can operate on the northern side of the European square right up to the Barents Sea. Now these air forces that surround Hitler's Europe are able to send into the air some 10,000 aircraft every twenty-four hours, not counting the Command which operated mainly over the sea.

Compare this with the capacity of the Luftwaffe. At its palmest days, the days of the Battle of Britain when the people and Air Force of the United Kingdom stood alone, and Hitler had no other combatant Power to face. Then the Luftwaffe would put into the air perhaps a thousand aircraft by day and about half that number by night, a total of around 1,500 during the twenty-four-hour period.

Today seven times that number of aircraft are engaged in the strangulation of German military power in Europe. Some are engaged against mobile targets within range of immediate military value, others are employed against longer-range factory output, some against communications by land, inland waterways, and sea lanes. But generally speaking it is during this pre-invasion period an Anglo-American version of the Battle of Britain in reverse. It is more than a battle of aircraft; that is what it is leading up to. It is the Battle of Europe.

BATTLE for a Continent

Waged by Air Alone

This leads one to the thought that air battles must be designated by territorial aggression or warfare as areas of contact which the designations accorded to either sea or land battles. For example, we have had during this war such air battles as those of the Atlantic, the Channel, and Cape Matapan, Midway Island, and the Coral Sea. We have witnessed land battles such as the Battle of Egypt, of Stalingrad, of Sicily, the South Seas, and so on, in all of which the air has played a prominent part. But during this pre-invasion period, when the armies mass for the triple Service assault upon the German Western Armies, we see a battle for a continent waged by air and by land and air alone.

It is convenient, but incorrect, to speak of a Battle of Berlin. This air assault, carried out by night by our night fighters and our day fighters, by night and day at varying time intervals, against one of the largest of the world's armament cities, is no more than an incident in a far larger battle. It is, as it were, what happens in the case of one ship in a great naval battle—to like the air action to a sea action. It is not more than that.

And so there are so many features in the great air attack upon Fortress Europe—the striking down of the heavy industries whose products go to the manufacture of large guns, tanks, ships, submarines, armoured trains, shells, bridges, and a thousand-and-one important items of military necessity in war; the systematic crushing of the enemy aircraft industry in widely dispersed parts of the continent; the damaging and destruction of enemy aircraft in the air and on the ground to add to the difficulty he must find in replacing aircraft torn out of the production line by the bombers; the pin-point attacks upon specialized targets where isolated factories or even individual houses in cities are demolished.

PIN-POINT Bombing Has Reached a High Degree of Accuracy

The recent attack by Mosquitos upon a house in The Hague is a specimen case. Here was a house containing matter supplied to the enemy, the destruction of which would be of corresponding usefulness to the Allied High Command. Presumably from a humanitarian point of view it was decided that it was necessary to destroy that one house and leave its neighbouring houses on either side safe. A surprise day attack from a lower altitude did the strategists' work. It was not the first time that such attacks have been made. It is many months since the similar attack upon the Gestapo headquarters in Oslo hit that special building standing in comparatively crowded part of the Norwegian capital (seeillus. p. 264, Vol. 6). Such accurate bombing brings to the aeroplane a new use in war, and places in the hands of directing generals the power to destroy pin-point target at a distance of hundreds of miles with as much accuracy as gunfire over one-hundredth part of the range. Such accuracy may require a different standard of intelligence work behind the enemy front. If it were possible to gain knowledge of the exact number of very important buildings containing key matter, it should become possible to use aircraft to dislocate the organization of the enemy staff to such an extent as to throw his machinery of offence and defence out of gear. This would be bringing the artillery of the air into action against the enemy staff with a vengeance.

It is noteworthy that during General Auchinleck's offensive in Libya a bomb landed on a table around which many enemy staff officers were gathered, a perhaps lucky shot which caused disorganization in the Afrika Corps next day. But low-level high-speed bombing has reached such a degree of accuracy when carried out by skilled pilots that it is possible to direct bombs into openings no larger than railway tunnels.

The great air battles are now battles of huge areas, covering so much territory and doing so quickly as to counter the feint and parry of the defence. Our striking force may even now be the area available for bases from which to launch our aircraft, for the territory in possession of the United Nations is comparatively restricted for the operation of such great air forces.

The question is then to determine, as far as possible, how long it will take with the aircraft which can be deployed from existing bases to pull the enemy down. It may even be that the 7,000 sorties a day which can be directed against German-held Europe by the United Nations' air forces based in Britain and the Mediterranean are not enough, and yet represent something approaching the maximum in operational possibilities.

Should this prove to be so it leads at once to the argument that territorial restrictions handicap the full employment of the Allies' air power. And, just as General MacArthur found it imperative to employ surface forces to capture airfields in the South-West Pacific from which he could strangulate Japanese naval and military power in that area, it may be that it is necessary for General Eisenhower to employ surface forces in Western Europe from which to expand the air offensive against Germany. Every airfield captured by the invasion forces will add power to the Allies in the air and curtail and still more the defence efficiency of the Wehrmacht in air, on land, and at sea. More airfields may be the master key in the shortening of the war.
Allied Awards for British Services Rendered

Ldr. Aircraftwoman I. G. LEASK was presented by Gen. EISENHOWER, Supreme Allied Commander, for "gallantry and exceptionally meritorious service rendered." On July 1, 1943, she located and identified a U.S. air formation which had become lost at sea.


Capt. H. RICHMOND, R.N. (centre), and Capt. R. G. ONSLOW, R.N., on April 30, 1943, received the Order of the Red Banner from M. Maisky, then Soviet Ambassador in London. Russian decorations were awarded to a number of other officers and men of the Royal Navy and Merchant Navy for "valour and courage" in the delivery of armaments in Arctic convoys.


Sgt. J. DEARDEN, R.A.F., won the American Air Medal for "meritorious achievements" in photographic reconnaissance for the U.S.A.A.F. The medal was presented at a joint British and U.S. decoration ceremony held at a U.S. Army Air Station in England in October 1943.

C.S.M. REGINALD ALLEN, of the Parachute troops, received the American D.S.C. from Gen. Eisenhower, Supreme Allied Commander, for bravery in stopping a German advance.

DANGER to life has always been the parent of superstitions. Wars make most of us more credulous, ready to believe gospels, more anxious to invoke the protection of unseen powers. Just now jewelers are cashing-in on this and making a lot of money. They can sell tweezer-halfpenny charms or smutles for about ten times what they used to cost. A little button with the figure of Saint Christopher on it could be bought for sixpence before the war. Now it cannot be obtained for less than 5s. 6d. Some even wear this in their buttonholes (at the risk, I take it, of being 'crem'd' on the charge of improper dress')—others conceal it under their clothes. Another saint much in demand is Saint Anthony. If you can pay in pounds instead of shillings, you will find no difficulty in purchasing a marble figure in enamelled or plated on gold. Seems a lamentable waste of money to me.

We hear a great deal about proliferating, and we are given the advantage of the war to overcharge for goods or services; but I know of many cases in which the manufacturers and dealers in the community are put before personal gain. I looked at a shelf of nettings in a suburban shop-window the other day and saw one offering to repair broken dice and clocks. At a clock so he mended, received it back in good going order, and was charged what seemed to me a very reasonable sum. The repairer told me about himself. He is in the building trade, and 'making the wheels go.' He has a small shop of his own, with a man. He does it largely to oblige poor folk who rely on a clock to tell them when they get up for their beds, and he makes them pay as little as possible. He could get work of the kind as far higher rates, but he will not take it. He was asked to call at a house where there were nine clocks; not one of which would go. He took the likeliest, put it right in three days, and charged 7s. 6d. The owner said he had been told in the shops that it would cost 15s. and take ten weeks. He offered to give it to a man who mended the clock and promised good money. The offer was declined, because this would have involved the repairer and his man in not only their alarm clocks and old silver 'turn 'n watch,' which they could not do without. That man is, I consider, a true philanthropist, a friend of his fellow-men. All honour to him!
BOMBING MISSIONS LIE AHEAD for these U.S. Flying Fortresses carrying out tactical training at a centre in Florida. At this large school crews of Fortresses and Liberator aircraft are coached in high-level precision bombing. Apart from the various combat theatres, America has at home four complete air forces, plus many commands for personnel training and experimental work. Total strength of the Army Air Forces is estimated at 7,200,000 officers and men.