

METEOROLOGY

Storm Danger Greater

War prevents the collection of radio warnings from ships in the Caribbean before they reach port. Special precautions are being taken by Army and the Red Cross.

➤ HURRICANE danger in Gulf and Caribbean regions is increased this year because of the radio silence imposed on ships at sea by the submarine menace.

In pre-war times, ships' reports of their encounters with these violent storms gave warning of their approach long before they reached the land. Now, the only radio reports that can safely be made are those from West Indian islands—which can't be torpedoed and hence have no need to fear giving away their positions by use of their wireless.

With the number of Army camps, flying fields and Navy stations greatly increased in the South, and especially in Florida, most exposed of all states to hurricanes, special precautions are being taken by military authorities, and particularly by the Red Cross, to guard against storm damage, and to be ready to move swiftly to the relief of any locality where a hurricane might strike. The civil population in the meantime is being advised to "get set" by putting houses, and especially roofs, into good repair, by laying in lumber and tools for boarding up windows if storm warning comes, and by preparing to store drinking water, food, and other emergency supplies.

There are some curious hurricane "signs" believed in by commercial fishermen. When bottom fish like channel bass, sheepshead and porgies swallow pebbles, they say they are taking on ballast to hold them down when the big blow comes. They also claim that big land-crabs move from their holes near the water's edge toward higher land when a hurricane is due. Seminole Indians believe that if sawgrass blooms a big wind is coming in 90 days. Thus far this season, all these "signs" have failed to appear, at least along the Florida east coast.

Hurricanes (and their China Sea counterparts, typhoons) could very easily play a major part in the naval warfare now raging in all the tropic seas. While warships, even small craft like destroyers, are strongly enough built to battle their way through severe tropical storms, they cannot possibly fight during one of them.

Airplane carriers will remain afloat all right, but they cannot launch their planes.

Safest of all craft, during a hurricane, is a submarine. Even the most violent waves are not felt, a few fathoms down, so all a sub needs to do is dive and wait the storm out. Torpedo-damaged tankers, merchant ships or transports, trying to make port, on the other hand, will have their chances of survival gravely diminished.

Ships in harbor are frequently in more danger during a hurricane than ships at sea. Docks and shore installations may be wrecked by either wind or by tremendous waves sent surging up the beach. Both we and our enemies are equally in danger from these storms. Tempests play no favorites.

Japan, and lands now held by the Japanese, are especially exposed, however,

to typhoons. Hardly a year goes by without typhoon damage somewhere on the Japanese islands themselves. Sometimes it is only a fishing village or two that gets battered and drowned; sometimes the storm's wrath is wreaked on a major city, its waterfront warehouses and its shipping.

By whatever name they are known—hurricanes in Caribbean-Gulf regions and in parts of the Pacific, typhoons in Far Eastern waters, cyclones in the northern Indian ocean—they are all the same kind of tropical storm. They are generated in the heated, stagnant belt air near the equator known as the doldrums. Once in a while an area of this heated air starts rising like an enormous bubble from the bottom of a pot. The earth's rotation indirectly sets it spinning—and a hurricane is born. It drifts toward the west, and away from the equator, and may finally sweep up the whole eastern coast of this country, as did the New England hurricane of 1938, or even swing out over the North Atlantic and finally blow its last breath out over Britain and northwestern Europe. Typhoons follow similar courses, ravaging the coasts of China and the Japanese islands.

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PUBLIC HEALTH

Motor Health Menace

➤ A MECHANIZED, motorized Army brings new health menaces to the soldier besides the old Army health hazards of infectious diseases. Deaths from accidents in the Army are not high, but are about equal to death rate from disease.

To meet the new health hazard, a special section on industrial hygiene has been organized in the Office of the Surgeon General. This section supervises health conditions in such of our war industry plants as are owned and operated by the federal Government, in addition to devising measures for protection of soldiers in the mechanized Army.

One of the big jobs of industrial hygienists in civil life is to keep up with new manufacturing processes and new chemicals used in industry, to determine their possible menace to health and to devise protection against such new menaces as are found. New processes and chemicals used in war industries are military secrets but the Army's industrial hygiene specialists are undoubtedly told

enough about them to devise any special protective measures that might be needed.

No special secret is the fact that men in tanks are exposed to unusual conditions of heat, fatigue and exhaust fumes which might be harmful. Special research on this problem is now under way to determine what if any health danger exists, and how it can be prevented.

Traffic accidents are a problem to the Army as well as in civilian life. But the lad who used to drive his old "jalopy" around corners at neck-risking speed is taught safe driving practices in the Army before he gets his hands on the wheel of a jeep.

Mechanics who keep the tanks and jeeps and other vehicles in good order are also taught, if they have not already learned, safe methods of handling tools and machinery.

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One thousand *plywood lifeboats*, the first of their kind ever built, are now in production.