

The *Firebird* had her engines giving full speed ahead for four hours and lost two shackles while the hurricane was at its height. One of her officers who has seen typhoons in the China seas and has also had experience of West Indian hurricanes said he has seen nothing to equal this.

A conglomeration of sixty-five boats, mostly pleasure craft, is to be seen on the beach near Mathew Avenue.

A great many cars were damaged, the covers being shred to ribbons and the enamel "burnt" off by the velocity of the wind; exposed paint-work generally seemed to have undergone the fire of blow-lamps.

It is generally agreed that the best roofing to resist hurricane onslaughts is that of cypress and cedar shingles, though few homes remained entirely dry throughout the storm. In some houses umbrellas were used in going from one room to another.

Residents of one exposed eastern house state that the building rocked so badly that they became dizzy, whilst one member of the family was affected with symptoms of seasickness.

We have heard of many courageous acts performed during the storm, but one of the most outstanding was that of Capt. Richardson, of the dredger *Lucayan*. He, it is said, saved over a dozen lives. People who were being swept past on sloops clung to the forestructure of the dredger, and the captain rushed to save them as they came, unheeding of the peril to himself. Capt. Wheeler of the *Isles of June* saved a Bimini sloop which was passing, and bravely rescued a number of people who were on board.

ADDITIONAL PILOT BALLOON STATIONS FOR THE WEATHER BUREAU

The air commerce act, approved on May 20, 1926, is entitled "An act to encourage and regulate the use of aircraft in commerce, and for other purposes."

It is the duty of the Secretary of Commerce, under the provisions of this act, to foster air commerce, and under section 2 (b) thereof "To make recommendations to the Secretary of Agriculture as to necessary meteorological service." Section 5 (e) of this act also provides that "Within the limits of the appropriations which may be made for such purpose, it shall be the duty of the Chief of the Weather Bureau, under the direction of the Secretary of Agriculture, (a) to furnish such weather reports, forecasts, warnings, and advices as may be required to promote the safety and efficiency of air navigation in the United States and above the high seas, particularly upon civil airways designated by the Secretary of Commerce under authority of law as routes suitable for air commerce, and (b) for such purposes to observe, measure, and investigate atmospheric phenomena, and establish meteorological offices and stations."

The Secretary of Commerce has recently made recommendations to the Secretary of Agriculture as to necessary additional meteorological service to be provided by the Weather Bureau during the fiscal year 1927, so as to furnish more complete information, forecasts, and warnings in aid of aviation.

In order that this service may be rendered efficiently during the current fiscal year an additional amount of \$75,000 has recently been appropriated in the second deficiency bill to enable the Weather Bureau to establish and maintain additional stations and facilities for observing, measuring, and investigating atmospheric phenomena, etc.

The Weather Bureau will provide this additional and necessary service along established airways in large part through its present organizations and stations, supplemented by pilot balloon observations at or near cities located on commercial airways. In most instances these cities already have regular Weather Bureau stations and the new service will be conducted under their supervision, but in some cases the observations will be made at the commercial flying fields.

There will have to be established about 22 additional pilot balloon stations, located along the transcontinental airway from New York to San Francisco, and along eight other commercial airways. Of these 22 stations, San Francisco, Omaha, and Chicago are already in operation. Further details will be communicated when preliminary field surveys, now being made, are completed by representatives of the Weather Bureau and the Department of Commerce.—*Weather Bureau "Topics and Personnel,"* June, 1926.

THE FUTURE OF AEROLOGY

In *Das Wetter* (Berlin) for March, 1926, W. Peppler sets forth under the above title, and with reference to Europe and especially Germany, certain ideas which will appeal to many thoughtful readers as being of universal application. It is for this reason that the excerpts following have been adapted for presentation in the BULLETIN, from a translation of Peppler's article made by Dr. H. C. Frankenfield.

It appears indispensable to raise at once the fundamental question: What form of development shall aerological research assume? This question is very acute, for aerology has arrived at a crisis and a turning point. The first and most fruitful stage in its development, in which the pioneer work was done, is past, and there has begun a period in which extension and research are difficult, a period which falls, unfortunately, in a time of greatest scientific urgency.

Occasionally one hears the view that exploration of the free atmosphere has reached an *impasse*. While a verdict in such harsh terms is not positively justified, it nevertheless contains a grain of truth. There is no doubt that there has come in the last ten years a certain pause in aerological development, during the post-war inflation period. But economic causes are by no means alone to blame for the deplorable retrogression of our science; even in normal times the development of individual sciences shows periods of progress and of stagnation. In spite of the evil condition in which aerology finds itself, its advocates must unite for more systematic research. This must be accomplished by disregarding special interests which have no claim on it, and by more systematic and clear sighted methods in the extension of aerological observatories.