latter case. It is important to note in this connection that mass movement, or at any rate wind resultants, rather than relative frequency of different directions should be made the basis of a study of planetary circulation. Cloud observations in general give direction only and do not therefore give us conclusive results. Added to this is the impossibility, as already stated, of observing wind conditions in the higher strata when low clouds are present.—*W. R. Gregg.*

SUPERPOSITION OF AERIAL CURRENTS IN THE PENINSULA OF CAPE VERDE, SENEGAL.

By H. HUBERT.

[Comptes Rendus, 168, pp. 99-102, Jan. 13, 1919.]

In the interior of western Africa, the normal fall of air temperature with increase of altitude occurs, whether the surface wind is the monsoon or the harmattan, but on the Senegal coast this rule is nor followed when the trade wind blows. Observations made there in a hydroplane during October and November, 1918, show that temperature increases with height, either from ground level or from a height up to about 100 meters, until a maximum is reached between 500 and 600 meters, which may be as much as 6° C. above the temperature at ground level. As height still further increases the normal fall of temperature again sets in, so that ground temperatures are again met with at heights of 1,000 to 1,300 meters. Relative humidity near the ground is high, but falls rapidly at about 200 meters, and reaches a minimum where the temperature shows a maximum.

The observations are explained by the superposition in this season of the dry and hot harmattan east wind above the humid, cool, northerly trade-wind, the plane of contact *being below 500 meters. It is always possible, however,* for the harmattan to descend to the surface, and entirely displace the trade-wind in these months.—*Science Abstracts*, 3, 1919, p. 150.

ABSTRACTS, REVIEWS, AND NOTES.

AMERICAN METEOROLOGICAL SOCIETY.

An American meteorological society will probably be formally organized at St. Louis, December 29. (*Science*, Aug. 22, 1919.) Strange as it may seem, considering the fact that our national weather service was organized half a century ago, there has never been a national meterological society. According to a recent circular, the project is being received with considerable enthusiasm and several hundred people have indicated their desire to join. The objects stated are:

> The advancement and diffusion of the knowledge of meteorology and climatology, and the broadening of their applications in public health, agriculture, engineering, aeronautics, industry, and commerce.

To accomplish these aims, membership in the society has been thrown open to all who may be interested; yet provisions planned for the election of eminent meterologists as fellows will insure its standing as a scientific society. Its membership field is the Western Hemisphere, and its hope is cooperation which will bring together the producer, the teacher, and the user of meterological knowledge. It is stated that no attempt will be made at the outset to launch a new meterological publication—only a monthly leaflet of news, notes, queries, etc., is contemplated.—*C. F. B.*

INTERDEPARTMENTAL BOARD ON METEOROLOGY.

The important benefits resulting from the application of meteorological principles in the direction and control of navigation of the air, as also major artillery and other military and naval operations, has led to certain kinds of meteorological work becoming a more or less permanent activity of the War and Navy Departments. This has resulted in numerous informal conferences between representatives of the Weather Bureau and the other departments, and the whole subject has finally been recognized as of such importance as to justify the organization of a more or less permanent interdepartmental board selected to discuss and consider the relative needs of the departments and the arrangement of cooperation and coordination of work to accomplish these results in the most economical and advantageous fashion and in a manner to avoid unnecessary duplication. The board was created by the Secretary of War, acting for and by direction of of the President, and is as follows:

> I hereby appoint a board to consider the question of the collection and dissemination of meteorological data and to make recommendations:
> Lieut. Col. Horace Hickam, Air Service.
> Lieut. Col. W. R. Blair, Signal Corps.
> Lieut. Tunis A. M. Craven, U. S. Navy.
> Lieut. (junior grade) C. N. Keyser, U. S. Navy.
> Prof. Charles F. Marvin, Chief of Weather Bureau.
> Mr. R. H. Weightman, Meteorologist, Weather Bureau.

The order further designates Prof. Charles F. Marvin as chairman of the board and provides that meetings shall be held at the office of the Chief of the Weather Bureau and other places at such times as may be designated by the chairman.

But few meetings of the board have been held as yet, but it is obvious that an interdepartmental agency of this character provides for the most effective coordination and cooperation between the departments interested. It is probable, also, that other departments of the Government that are interested in flying, as the Post Office Department, for example, may be requested to designate representatives.

It is expected that important provisions will be made for the enlargement of the meteorological work of the Bureau in the interest of civil and military aeronautics.—*Weather Bureau Topics and Personnel, Sept., 1919.*

UNIFICATION OF THE BRITISH METEOROLOGICAL SERVICES.

By LIEUT. COL. E. GOLD.

[Extracts from Symons's Meteorological Magazine, September, 1919, pp. 86-88.]

A famous general of the Flying Corps once remarked that, whatever may have been his opinion about the policy of the allied supreme command, he was fully convinced that a single meteorological service was the correct policy for the Western Front. Full interallied meteorological unity was never indeed achieved but there was, in the field, a national unity in favorable contrast with the trinities in Paris and London; and there was the closest cooperation between the French, British, and American military meteorological services.

With the end of the war the movement for unity gained power, and now, at last, the British Isles have one meteorological service with an establishment or personnel and equipment more in accordance with the importance of the