5. Direct routes are available day or night, or in fogs (within limits).

6. Positions of altitude are most adapted for observation and signalling, and for locating submarine objects.

7. Air operations cannot be guarded against except with similar craft or by special terrestrial apparatus.

It is evident from the foregoing statements that nearly all classes of air craft will be capable of being successfully and conveniently employed for military purposes. If we are to judge of the probable efficiency of the various craft by the performances of the past few years and look somewhat to the future along the same lines, we can expect the various services to be performed by different kinds of craft in much the same way as are the present naval services. For instance it is reasonable to expect that an organization of air craft for military purposes would probably be made upon such a basis as the following:—

1. Kites of various types for photography and general observation purposes of simple requirements.

2. Captive and free balloons of the types heretofore employed for observation, photography, signalling direction of artillery fire, etc. They could also be used on lines of defence.

3. Aeroplanes of various types for fast scouting and despatch purposes also for rapid attacks on land or naval forces or upon dirigible balloons from above, used much the same as the mosquito fleet on water.

4 Rapidly moving and lightly equipped dirigible balloons being capable of easy and rapid manoeuvre for moderate range of action, both offensive and defensive, in much the same manner as naval cruisers.

5. Heavy, large, high-powered dirigible balloons of wide range of action and with numerous air-tight compartments and with heavy armament for a "first line of battle" employed against either air or marine craft or against land forces.

Operation of Air-Craft.

As to the probable methods of operation of the various types of airships much can be said and conjectured, but until a good many features of endurance, reliability, speed and handling are tried out, it is not likely that definite conclusions can be reached. Even with the more stable types of airship, and in the short years of trial up to the present, the accidents which occurred, and the loss of life, have been appalling. In the year 1910 the number of famous aviators who have lost their lives has been most deplorable, but unfortunately it is to be reasonably expected that there will be still many more accidents and loss of life in the strife for the mastery of the air before the art of building