

## Success of Aeroplane Patrols

Wisconsin's Experiment Proves Practical Use of Flying Scouts —  
Aviator Vilas Surveyed Sixty Miles at a Glance.

(Additional interest is given the following article by the knowledge that several Canadian forest protection officials have suggested the use of aeroplanes for patrol purposes. One would be unwise to deny the adaptability of flying machines to protective work in view of the good results obtained in Wisconsin.)

*By F. B. Moody, of Wisconsin, U.S.A.*

During the fire season of 1915 Wisconsin was fortunate in having the services of Mr. L. A. Vilas, who was operating a hydro-aeroplane in the vicinity of Trout Lake, where the central station of the Forestry Field Organization is located. Mr. Vilas volunteered his services, and was made a deputy forest ranger by the State Forester without remuneration.

The forest reserve region, although of high altitude, is a great plain containing many lakes and swamps, though no abrupt hills, and from the aeroplane some 200,000 acres of land can be surveyed. A fire 30 or 40 miles away can be easily detected.

The pilot should go over the country he is to patrol either on foot or horseback, thoroughly familiarizing himself with all lakes, rivers, railroads, strips of timber and cleared lands, and make it a point to find as many land marks as possible, at least one for each point of the compass such as a lone settler's farm, a brightly painted house, a railroad (the direction in which it runs, as the smoke of a moving train is oftentimes useful in keeping one located), a small town or range of hills. All the above objects mentioned are very noticeable 10 or 25 miles away at an altitude of 800 to 2,000 feet.

### *Seeing for Sixty Miles.*

At an elevation of 1,500 feet on a clear day a fire 60 miles away in any

direction is visible to the naked eye. It isn't a case of finding a fire, but to locate it correctly is the job. Smoke will show up very plainly from the air. Mr. Vilas reports that during a flight across Lake Michigan from St. Joe, Mich., to Chicago, he was completely out of sight of land, or anything else for that matter, for over three-quarters of an hour, and at an altitude of 4,600 feet. The first thing he saw was the smoke from the South Chicago Rolling Mills. This was in sight over ten minutes before any shore line was visible at all.

People often ask what a country looks like from the air. It's difficult to describe it, except that it looks like a large painted map on a small scale, without section lines.

The efficiency of an aeroplane in spotting forest fires is without doubt as practicable as any use to which it could be put. I myself was very much surprised with what ease a fire could be spotted and located, and there is no question in my mind but what the aeroplane will practically do away with some observation towers. The use of the aeroplane in the European war in the way of spotting and locating gun fire, armies of men, supply trains, etc., is well known, all of which objects show up comparatively small in comparison with forest fires.