Lands and Forests Official Tackles Big Question, Can Aircraft Eliminate Lookout Towers?

Editor's Note: J. C. Dillon was with the Ontario Department of Lands and Forests when he wrote this story He has retired after many years with the Forest Protection Branch.

By J. C. DILLON

It has been well and truly said, that the largest room in the world is "The Room For Improvement" and oddly enough it is generally only half filled.

Within that half - filled room of very select occupants, one will invariably find some members of the Ontario Department of Lands and Forests for the very practical reason that they are constantly striving for improvement. Witness among many others the Splake development and tree fertilization now current.

The immediate problem they are now ripping apart in all its aspects is intricate. The "Big Question" is can they eliminate Lookout Towers, maintain a high degree of forest fire detection and depend on aircraft to carry the load.

For many fire seasons it has been the practice to use both mediums, one supplementing the other and there has not been much wrong with that system. In fact it was considered a somewhat impregnable system.

Why change?

The answer is simple in essence but not quite so simple in application. The reason, in the most simple terms, is to improve the system and reduce detection costs.

Nothing in this world remains static for too long and as events change, it becomes necessary — if one is going to maintain a top position in any field — to advance with the change.

What is now taking place in Ontario is the institution of a plan selecting two areas of the fire district, in which tower detection was eliminated and turning the detection job over to aircraft. The two sites were designated as the Temagami and Kenora project areas.

The foregoing conclusions were commercially operated Cessna types 180 and 185 with a cruising speed of from 105 to 115 mph. The observers carrying on the detection flights were under graduate forestry students. Most flights were carried out about a 2,500 - foot altitude. Flight routes were plotted and followed according to visibility conditions.

The multiplicity of commercial aircraft readily available in Ontario today simplifies the plan.

Some of the disadvantages:"

1. Elapsed time after a fire starts and is discovered by aircraft may be greater than using towers.

2. Adverse wind conditions may prevent flying. This happens only infrequently in the course of a fire season.

3. A complete aircraft system will leave gaps in the communication and weather network. Such gaps will have to be filled by other means.

The eventual decision reached by the Forest Protection Division will be of paramount interest to all Forest Protection men in the Dominion and elsewhere in the world where forests and fires occur.

VANISHING BREED OF MEN

Not too long ago as time is reckoned, there existed a breed of men who actually gloried in their work as towermen. Such men generally speaking had a somewhat limited education in book learning but sufficient to adequately handle the job. They were mostly comprised of trappers and loggers. The winter trapping season kept them solvent during that period, as did the work offered in the pulp and logging camps. A few were men whose health demanded outdoor work, fresh air and peaceful surroundings and also among their numbers were students who wished to concentrate on their weak subjects during the summer, without interruptions or distractions. These represented the calibre of men who manned the towers.

CONSULTS OTHERS

In launching this study the Department had recourse to the findings of some large timber operators, outside of Ontario, who conduct their own fire protection. These operators had decided in favor of aircraft detection, only. That data was helpful, but Ontario needed to know much more than any other reference would supply, even though such references were founded on results.

It was also decided that the experiment would be conducted over a period of time, as not too many fire seasons follow a similar pattern. The change over, if and when it does occur, is bound to be gradual and governed entirely by results, coupled with costs and using limited areas annually for testing.

The results obtained to date are being given a thorough and painstaking check over. If a move of any magnitude is warranted, it will have for its foundation some hard, cold facts that will not be easily disputed nor challenged.

From the experience gained during the 1966 season which witnessed the commencement of the plan, the following points have been established, using the Temagami - Kenora test areas and listed as "advantages" and "disadvantages."

The advantages of using aircraft entirely for detection:—

1. The aircraft system is flexible. It is possible to mould the detection system to meet day to day requirements of fire risk and hazard. The system can be terminated during days of low hazard, permitting the staff to devote time to other functions.

2. Complete information can be obtained from the aircraft, thereby providing the Suppression Staff with accurate information on which to base suppression action.

They had 20-20 vision, knew the bush and did not mind the solitude. They could well fend for themselves, were reasonable good cooks and could "make-do" if need be and they did not concern themselves too much about the wild animals or flies. They were individuals — each in his own way. So much so, that when an effort was made to place two men on a single tower as a safety or precautionary measure it did not prove practicable. The Lookout Tower favored solitude.

Today, times have changed. Bush operations are no longer seasonal. Year round activity is the order of the day in most areas and there is a considerable jump between a Towerman's salary and that of a pulp cutter. Trapping is still capable of providing a means of livelihood but cannot be considered in the category of providing a steady income. The net result is that a job as a Towerman has lost its appeal to a very large extent and this is one of the mitigating circumstances in leaning toward aircraft detection. Today, men so hired wish to work a five - day week and what is infinitely more important, they want to get out to civilization on days off duty and that can provide as knotty a problem as any Suppression Administrator has to deal with. No one is yet endowed with a magic formula that says no forest fires will start on a Friday or a Sunday or on any day, when the lookouts are not manned.

I have as many other Rangers must have, many nostalgic memories of the earlier towermen. On the whole, they were clean living, God fearing and sensible men with a high sense of devotion to their job. There were no "Hippies" in that group. Long hair yes, but not by choice, rather, the scarcity of barbers in the hinterland.

3. Aircraft provide almost 100 per cent visible area whereas the majority of the existing tower systems provide 70 per cent.

4. Less staff is required to provide the aerial detection service per unit of area as compared to the fixed tower system.

5. Less communication equipment required and the frequencies are generally less cluttered.

6. Aircraft eliminates the false alarm. In many cases aircraft are dispatched to substantiate tower reports before other initial action is taken.

7. Aircraft detection is provided for less cost.

The aircraft used to create

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