

## ARE WE DOZER HAPPY?

by D.R. Lejeune.

Since the advent of the dozer, this remarkable machine has solved many a man's problems. One sees occasional cases where it has done his thinking for him.

There must be a limit to its usefulness. I am confident that in controlling forest fires, the dozer can add to the difficulties and expense rather than reduce them. If this is true, the points raised here are worth consideration by foresters.

There are only two methods of attacking a major fire:-

- a. Fall back to roads and back burn at a time when the new edge will be as cool as possible.
- b. Doze a track around the perimeter, right against the fire or near it.

There are many shortcomings of the latter method. They include:

1. The track is at best very rough causing heavy strain on vehicles and men.
2. There will often be places where it is not trafficable to even 4 x 4 vehicles.
3. Travel is in bottom or crawler gear.
4. The distance between points A. and B. on the plan can often be doubled on this track.
5. Administration difficulties are increased because of all the above and the fact that fire fighters do not know exactly where they are.
6. If the track is on the edge of the fire, the edge may be "hot", requiring considerable mopping up.

Method (a) has none of the above shortcomings and, above all, the saving in time enables men to prepare well for the "back burn" and still be sure of getting the job complete before the next day.

The only arguments heard against method (a) are:

1. It increases the perimeter.

To those who argue this way I can only suggest "Travel some of the dozed edges and check for yourselves".

2. It increases the area burned. This is certainly the case for the first night, but by the second night this will often not apply. Why? Because the dozed edge was not safe, the fire jumped and the track was not fast enough to enable suppression. If conditions are such that it is possible to fight the fire at night, and this is almost invariably so, there is no reason why back burns to the head and flanks of the fire should cause extensive damage. Any damage done can be written down as insurance against the risk incurred if a dozed edge had been used.

The main difficulty in falling back to roads is to ascertain precisely the boundaries of the fire in plenty of time to plan those all important operations for the first night. This calls for good co-ordination between the field and H.Q. and a spotter plane with air to ground communication should save a considerable amount of time. It is at this stage that there may be a tendency to weaken and let the dozer find the fire for us.

Of course the method of attack must vary with the intensity of the road network, and it is not suggested that we can always use our roads alone to stop fires, but it is emphasised that they should be given first consideration.

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