capture 500 million board feet annually of allowable cut lost on timberlands not now loggable in the Douglas-fir region. Timber harvesting on an additional 17 million acres of currently nonloggable lands in western United States would be possible with less road construction and better protection of water and soil resources.

In conclusion, I would like to say simply that I consider any Federal money spent on additional aerial logging research a god investment. By increasing the amount of timber harvested annually we will experience direct returns to the Treasury, at least with respect to that timber harvested on national forest lands. The additional jobs created by the harvesting of previously impossible-to-reach timber will return income to the Treasury in the form of taxes on wages and salaries. Moreover, balloon logging promises to further Alaska's economic development, a matter of considerable Federal concern.

None of this even goes to the conservation benefits that accompany aerial logging techniques. Balloon logging, for example, reduces the need for logging roads by about 50 percent. Each mile of road permanently destroys 10 acres of trees—trees which naturalists enjoy and trees which could be harvested again

in the future.

I urge for an increase in Federal participation in aerial logging research at the earliest possible date.

[From the Congressional Record—Senate, Oct. 14, 1966, p. 25849]

SAVE OUR FORESTS

Mr. Bartlett. Mr. President, in the near future, America and the world may be confronted with a very serious problem—the problem of a timber shortage. Although presently there are large timber resources in the United States, and throughout the world, the world's timber needs are growing. It is probable that in another 10 years our supply will meet our demand and that by the year 2000 there will be a timber shortage. We must recognize this problem and prepare for it. Not only must we try to conserve our current sources but we must also try to find new sources.

Mr. President, my State, Alaska, provides these new sources; it is perhaps the only undeveloped potential source left in the United States. There are 40 million acres of untapped timber resource in Alaska which is thought to be of use commercially. However, conservation of this land presents a grave problem, for Alaska has always been plagued by forest fires. In the last 10 years many thousands of acres of forest land have burned in Alaska, and in 1966 vast acreages have been burned over with threat to life and property. One reason for the extent of this burned acreage is that a fire in Alaska frequently spreads to thousands of acres if it is not controlled within the first 300 acres. An average of 4,400 acres per fire are destroyed in Alaska as compared to a 30-acre average in the rest of the United States.

Such high statistics are due to a variety of conditions typical only to Alaska in the United States. Weather conditions constitute one of the major reasons. Glaciers can cause extremes in weather; their presence may affect wind velocity, giving it added force and increased irregularity. The winds tend to become stronger in late afternoon at which time most lightning storms occur. These storms account for a large percentage of burned acreage because controlling methods are not always as available to areas with lightning fires as they are to areas with man-caused fires. Remote, uninhabited areas are susceptible to lightning fires but not to man-caused fires. Air pressure units, which affect the strength and development of the fire, also tend to build up in sections of Alaska. Grass, moss, and other rapid burning plants are present in all of Alaska's vegetative area. The enormity and lack of communication facilities in some of the more sparsely populated areas of Alaska increase the problems and the necessity of better detection methods.

The need for improved fire detection methods exists not only in Alaska but in every one of the 50 States. Each year million of acres of valuable forest land are destroyed by fire. With the increasing need for timber we must conserve as many of our timber resources as possible. Even if enough new sources were found and utilized there would still exist the exigency of preservation. In the past people have relied upon visual observation for fire detection. This has proved ineffective for obvious reasons. Weather conditions, illumination, topography and even the extent of the delay from the time the fire ignites until it is discovered