export problem and of the Alaska timber industry. I am confident that when these hearings are completed, all will have a better understanding of the log-export problem and of the Alaska timber industry. At that point, I believe all will see the case for continuing the Forest Service's ban on round log exports from Alaska and we will be able to come up with a solution to the problem in the Pacific Northwest.

[From the Congressional Record—Senate, Apr. 1, 1966, p. 7086]

BALLOON LOGGING

Mr. Bartlett. Mr. President, for some time now I have been keenly interested in various aerial logging techniques. More recently, my interest has been directed to research developments in the field of balloon logging for reasons I will explain.

First, I am interested in timber and logging techniques because the timber products industry in my home State of Alaska is currently developing in a very big way. With two major pulp mills already in operation, the St. Regis Paper Co. was recently awarded an 8.75-billion-board-foot timber contract which requires construction of a third mill by July 1, 1971.

The St. Regis plant is expected to add more than \$30 million to Alaska's expanding economy and provide more than a thousand new jobs in the mill and

woods combined.

Much of this timber development is taking place in southeast Alaska, and most of it there within the Tongass National Forest. Therefore, receipts from the timber harvested go into the U.S. Treasury through our agent, the Forest

The topography of the Tongass National Forest is generally mountainous and rough. Logging is extremely difficult and a portion of the marketable timber is impossible to reach or at least economically unfeasible to harvest by conventional methods.

Balloon and other aerial logging systems offer excellent possibilities for economically harvesting timber from difficult access areas while protecting multiple-use values. Conventional logging methods on these areas of difficult access and steep terrain are very costly and tend to increase soil erosion, landslides, and flood damage. In addition, conventional logging and roadbuilding are not always compatible with the high demand for scenic and recreation areas, also important resources in the Alaska economy.

Developments in aerial logging to date have been accomplished by cooperative efforts between the timber and equipment industries and the U.S. Forest Service.

These efforts have shown balloon logging to be feasible.

With industry-developed equipment and Forest Service systems engineering research, basic information has been obtained for laying out and operating skylines and balloon logging systems. Having demonstrated the technical feasibility of balloon logging, further research is needed to make the system economically operational. Studies are needed on balloon configurations, development of gas supply systems, means of deicing, ground handling and transport facilities, and other performance tests.

The substantial progress made to date with the limited resources available for this work is indeed a tribute to the ingenuity and dedication of both the industry

and Forest Service engineers working on this vital project.

I think the time has now come for the Federal Government to make an additional contribution to the aerial research work. In my view we should step up our efforts in this area. My motives are somewhat selfish, in that the development of a commercial balloon logging system would be a great boost to the Alaska timber industry, but there is more to it than that.

It is estimated that development of balloon logging or other aerial logging systems could capture an additional 440 million board feet of annual allowable cut in Alaska on National Forests alone. None of this timber could be logged by currently used conventional methods. Over \$1 million per year additional would be realized in stumpage receipts; three-quarters of that amount would go into the Federal Treasury. The remainder would be added to the income of local Alaska governments. Even more important perhaps is the fact that several thousand new jobs would result in Alaska from the harvesting and processing of this extra stumpage.

Mr. President, the promise which balloon logging holds is by no means confined to Alaska. For example, the Forest Service estimates that such a system would