RECORDS OF DINNER MEETING
OF
WESTERN SNOW CONFERENCE

SACRAMENTO, FEBRUARY 27, 1946

The dinner meeting of the Western Snow Conference convened at 6:00 o'clock, p.m., February 27, 1946, at the Palm Court of the Senator Hotel, Sacramento, California. Mr. George D. Clyde presided as Chairman.

After dinner, and the presentation of the color and sound film, "Snow Harvest," the following paper by Glenn H. Simmons was read, dealing with the experience of the Bureau of Reclamation in operating the Sno-Plane in the Jackson Hole country.

"THE SNOPLANE IN JACKSON'S HOLE."

Since the dawn of the mechanical age men have tried various devices and machines to carry him and his burden over the snow, and into the remote regions of the winter wilderness. Some were inspired to build a machine to better fit themselves to serve their business needs or to serve their communities, while there were others who drew their inspiration from the sportsmans view, but no matter what the source of need, there have been numerous attempts to find the all purpose vehicle for snow travel.

My experience has been confined almost entirely to the Snoplane and it's use in the Jackson's Hole Country of Wyoming. The winters in Jackson's Hole are long and by some are rated severe. The early and mid-winters snows are light, dry and fluffy, the sort of snow that allows a skier to sink sometimes over his knees and to ski all day long, seldom seeing his ski tips. Then there are other snow conditions ranging from wet and sticky to the ideal type, so often pictured on the cover pieces of monthly issues of the "Federal-State Cooperative Snow Surveys and Irrigation Water Forecasts."

We have used the snoplane under all these conditions and have thereby been educated and learned many of it's peculiarities.

Two men form the snow survey party at Jackson Lake. They carry with them the usual survey equipment and each has his webbs for use at survey points or for any emergency. If during the course of the trip it is found that the going is slow due to plowing deep trails with the skis, one man and the equipment is unloaded and the trail broken ahead by the lightly ladened snoplane. After the trail has been once opened, any reasonable load may be hauled. Time lapse during trail breaking procedure is generally about fifteen minutes, but may be as much as an hour depending on snow conditions.

For wet or sticky snow, we have found a simple wax preparation which seems to fill our needs. This wax is prepared through mixing by volume 1/3 parafine to 2 /3 asphalt, apply mixture smoking hot to warm ski surface and then smooth the cooled wax with a blow torch. One application of this formula has given satisfactory service for as much as 250 miles when used on damp or wet snow.

The snow courses for Jackson Lake and adjacent watersheds are near highways or Forest Service access roads or are near Jackson Lake shore line. In other words, we have enough open trail to assure us of plenty of clearance for

the spinning propeller. Much of the trail twists and turns and in many spots an ordinary pickup used during the summer time must travel in low gear to have power enough to climb the grades. Many times it has been necessary to assist the snoplane, while climbing a long grade, by kicking along with one foot much as a boy does with his coaster wagon; and on occasion I have actually led the snoplane up grades. The pay off for the few tough miles encountered during the past four years, are the several thousand miles of easy swift travel which the snoplane has delivered.

The snoplane has been invaluable to the Minidoka Project of the Bureau of Reclamation in the operation and maintenance of Jackson Lake and Grassy Lake Reservoirs as well as in it's use in conducting Snow Surveys.

Numerous emergency runs have been made in cooperation with other government agencies, local law enforcement officers, and neighbors in distress. Emergency loads hauled in the Snoplane have ranged from routine supplies delivered, to the isolated gate-tender at Grassy Lake Reservoir, to the rescue of airplane crash victims, or fast trips to the hospital with broken bones or a successful race with that noble bird, the stork.

The following is a short summary of the Snoplane log sheet:

Total miles traveled - 11,805
Total gallons gasoline burned - 2,042
Miles per gallon - 5.8
Engine is a Lycoming 65 horsepower, 4 cylinder aircraft model.

Glenn H. Simmons

Following Mr. Simmons paper, a discussion prepared by James C. Marr, was read.

DISCUSSION

(Glenn H. Simmons' Paper on Sno-Plane Operation in Upper Snake Watershed)

Sno-planes can be expected to operate better on the watershed of upper Snake River than on Boise River drainage where I have had some recent experience with one of these machines. This is the case because of the condition of the snow and the type of terrain.

Since the sno-plane runs on skis, condition of the snow has a good deal to do with the ease with which it travels. If the snow is sticky or wet, it requires more power to start and keep the machine moving than is the case when the snow is dry and cold. Depending on the snow condition a sno-plane may become stalled, it may be able to move along at the rate of only a mile or so an hour, or it may travel at a breath taking pace. Up in the high altitudes along the Continental Divide on upper Snake River watershed where Mr. Simmons and others have operated sno-planes with the greatest success the temperatures are the lowest and the atmosphere the driest. Accordingly the snow cover is usually dry and cold. The difference in this respect between the upper Snake River watershed and the Boise River drainage is suggested by the mean monthly winter temperatures at Moran, Wyoming, and Arrowrock, Idaho.