

Aerial Operations - page two

Without the planned landings on the glacier we recruited Mr. C. Kirk of Yakutat who offered to make the glacier landing, using his Grumman Duck airplane (1050 H.P.). This, a surplus Navy plane, is highly overpowered and has a long pontoon extending out in front which would prevent nosing over. This plane has a blower.

Loaded with over 1300 pounds of cargo the plane made a successful landing early in the morning at 5500 feet elevation on the Seward Glacier, but was unable to take off (unloaded) even after a two-mile run down glacier. (Since the visibility from the airplane is poor there is a chance of going into a crevasse when attempting takeoff or landings, so precautions must be taken).

The heavy plane squashed the pontoon into the frozen snow about 10 inches. (This was the morning Mr. Kirk felt it would be possible to land a small plane directly on wheels). The airplane was in poor shape (it burned over 5 gallons of oil per hour) and Mr. Kirk felt that had it been developing full power (1050 H.P.) he would have gotten off the glacier. Without full power he decided to wait for a wind to assist the takeoff.

He did not try the takeoff by getting into the old pontoon ruts, which would probably have lessened the drag. The necessary wind blew from the southeast four days later and the takeoff was accomplished. Yet with the wind were clouds and the return to Yakutat was made, in part, by the use of instruments. The snow was just walkable.

Both of our means for operating on and off the glacier were unsuccessful because of excess drag during takeoff and far too little power. This type of operation is of course feasible, but in the case of small planes the skis should be retractable and a high takeoff propeller on the plane.

A pertinent factor in landing and taking off of glaciers is the condition of the snow. On clear days the surface of the Seward Glacier would melt soft in the afternoon to from ankle to knee depth, whereas at night it would freeze hard, depending upon the altitude and air currents. (In overcast weather the temperature was more stable and the temperature usually slightly above freezing, rising slightly higher in the afternoons). It would seem that landings under these conditions would be best in the morning and likewise with the takeoffs. Also, operations when the glacier surface is hard would decrease the danger of falling into hidden crevasses.

The converse is true with air drops; that is, the food and equipment. Afternoon drops in the soft snow are desirable to prevent damage to supplies. However, these drops should be made in waterproof containers unless the drops will be picked up in a matter of a few days. The items will sink deep into the snow and subsequent thawing may be detrimental. If they are not to be reached for several days after the drop, it may be well to drop on a hard surface. A light snow fall could easily hide bundles that have been imbedded into the snow, whereas this is not as likely if the cans are exposed and on the surface. Bundles arranged for drops on hard snow must be packed and tied securely.