Your Name

Professor's Name

Course Title and Number

Paper's Due Date

Air Transportation

Introduction

An operation of exploration for minerals was being carried out by a medium sized company in a remote area. As this project was expected to last for at least a year, it was necessary to ship materials, equipment to the area to establish a base camp. Thereafter it was necessary to supply not only the base camp, but also the teams that were out prospective, away from the base for several weeks at a time. Not only did they need to be supplied, it was necessary to send out samples on a weekly basis for analysis. To obtain the contract the company had to submit a tender in competition with other companies. To keep their prices low, their tender was based on road and rail transportation. To test the feasibility of this, the company did a dummy delivery to the base area. Then they sent a team of drivers out into the areas to be prospected. Their results showed this would be feasible.

Analysis

As the project got underway the bulk items, such as materials for bungalows, furnishings, lab equipment and what was needed to set up the base were shipped by rail. They were collected by trucks and delivered. However, the seasons changed, and what was a dry area, became a wet never-ending mud field. The 4x4's could barely manage to move the teams into position. It was impossible to truck the supplies in. Soon the whole project was in danger of being wiped out. Food, fuel, and equipment stopped arriving. 4x4s with their teams of prospectors were stranded in mud, running out of food, unable to move on schedule to their next area. Their samples were not being sent back for analysis. The project was in danger of being canceled.

Preferred Alternative

As the train component was unaffected by the weather, the supplies were reaching the launching area on time. The issue was how to get them to A) the base camp and B) to the different prospecting teams. A team investigated the base area and discovered it was reasonably stable, with the main obstacle being the connecting road from rail to base. The second problem was the ground conditions out where the teams worked.

Justification

A 3-prong plan was put forward:

1. Firstly, the people at the base would identify and mark out the land stable enough to land an aircraft. As Lakes District and Air comment, " The Beaver is the workhorse of the north and the perfect machine to move crews and supplies into remote worksites" (Mining & Camp).

2. Secondly, once this was done, the suitable cargo planes would transport all necessary supplies and equipment to the base, and bring back samples for analysis. To keep costs down, the plane would be packed, take off, land, be unpacked, load samples and return on the same day.

3. Further investigations found helicopters could be contracted and stationed at the base (“Providing integrated logistics solutions”). It would take daily supplies to the currently stranded teams. Because of vertical landing and takeoff, the muddy conditions did not present an insurmountable problem. Once a team had finished with an area, the helicopter could move the teams to their next area. Samples would be collected by the helicopter and taken to the base. From there they would be flown out.

Outcome

1. The project went ahead and the predicted outcomes resulted.

2. One large benefit was that large amounts of fuel did not have to be shipped in regularly to keep the 4x4's running. This helped offset the cost of the air transportation.

Works Cited

"*Mining & Camp."* Lakes District Air & Fishing, n.d. Web. 28 May 2014. <www.ldair.ca/air-services/mining-services/>

"*Providing integrated logistics solutions in some of the toughest locations on Earth*." Toll Remote Logistics. Web. 28 May 2014. <http://www.tollgroup.com/tollremotelogistics>