01-83-05-03

Staples Brown

Fairbanks, Alaska

1980s

Steve Lay

University Focus series

Staples Brown talked about preparations for winter at the University of Alaska Fairbanks campus. There is an increased load on the heating plant. They have to gear up for the snow removal. He tries to staff and equip themselves for a certain level of maintenance functions. It is not economical to have a lot of staff and equipment sitting around idle. He tries to make his best guess about the average snowfall and plan accordingly. He said it is somewhat of a poker game. They are changing their mode of operation a little bit this year. They have backed off on the number of full time staff available for snow removal. He feels they have enough staff to keep the campus open and allow people to get to their destinations. They then go back and clear parking lots and sidewalks. There are certain re-occurring activities that happen in the winter such as sanding of the roads. They then staff up and have people come in at four in the morning. They do have a supervisor whose responsibility is to make sure that the streets are safe for travel at all times. He said the worst weather for keeping the campus safe is icy conditions. The worst weather for keeping it clean is dry windy weather in the summer. The worst weather for operating the campus is in the middle of summer. They are geared up for winter conditions and not summer. Most of the buildings are designed for an air conditioning load of a week of ninety degree weather a year. A warm summer is difficult. They do not have a central chiller plant that services the whole camp. Their air conditioning equipment is spread throughout the buildings in small increments. It is not efficient and not highly reliable. He said they are set up basically for winter and they struggle through the summer. Their last maintenance disaster was a failure on the air conditioning system in the computer center and it had to be shut down even though it was -40 outside.

Staples Brown said they prepare for the average events by developing feedback mechanisms so they can schedule out as much maintenance as possible. They staff up for handling problems. They address the peak periods with overtime staffing or temporary help or student labor. They are almost 100 per cent student workers for ground care and snow removal. He talked about surprise events. It is difficult to prepare for them. They have had heavy rains in the summer and that means certain people have to get to campus quickly. He talked about caring for the Beluga building. They were using a helicopter to sweep off the snow. They are prepared to drop the hardware and let the building come down when conditions are bad and a helicopter can't be used. He talked about back up for their electrical system. They are tied into Golden Valley and have a standby generator. They have 100 percent redundancy in their steam generating capabilities with both coal and oil except at certain times of the year under extreme cold conditions. They might have to curtail some activities in some of the buildings.

They are not under a union contract. Most of their job descriptions are set up so they are able to do this. The only time they had crafts crossing lines was when the Beluga building came down.

He talked about the snow season. He said he would prefer to see three or four big dumps instead of a couple of inches at a time. Their core force is a lead equipment operator, five other operators, two laborers, and two others that could be put into service. They have enough workers to get the campus open. He talked about the types of equipment they use for snow removal. He is in the process of lining up stand by equipment. They have a new sand truck which was built in their shop. They do not use ashes any longer on the streets. It was decided that it generated too much dirt in the buildings. They use pea gravel all winter and try to get it cleaned up in the spring before commencement. Their biggest cost is labor.

He talked about maintenance during the winter. The biggest complaints they have are slippery sidewalks. They try to keep them safe for passage but don't spend all their time on them. The students handle all the snow removal around the dormitories. Freeze up problems start when the cold weather hits. There are a few buildings on campus that have not been converted to an ethylene glycol mixture and have windows that can be opened. The dormitories are the most notable. Almost all of their other problems are pilot error. Another critical area for winter operation is proper maintenance on the steam traps. They have a closed system. The steam leaves the power plant, goes out to heat the buildings, returns as condensate and is reheated. He talked about the water which is used in the system and treated with a reverse osmosis system.

He talked about head bolts on campus. They are switching out to circuit breakers. He commented on upgrading the heating and ventilating systems.