Night Skiing on
Whitefish Lake Golf Course

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For: Surveying 271
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Night skiing on Whitefish Lake Golf Course is a great way to get some outdoor physical release from the daily grind during wintertime.

The ski track is run by Glacier Nordic Club and covers twelve kilometers across the thirty-six hole golf course; the track is groomed daily. The night ski track is 2.8 kilometers (1.7 miles); there are dim light bulbs, attached to four foot tall posts, that are about twenty feet apart all around the track. The OutBack Ski Shack is the place to visit for information; it is located near the Whitefish Lake Restaurant/club house off of Highway 93; this is also the place to park and go through Grattan’s Shaft (the tunnel) to the night ski track.
I mapped the night ski track over two days during the Thanksgiving break using a GeoExplorer 3. I can check Quick Plan, a data graph that tells me how many satellites there are to use for any given hour, from the PathFinder Office 2.9 software. I get my mapping information from a minimum of six satellites; the more satellites, the more precise the mapping positions. The positional dilution of precision (PDOP), for this project, cannot fall below six satellites. The graph shown is for November 27th.
With the help of a data dictionary, I can map different features such as points, lines, and areas. The data dictionary is a file that can be downloaded from PathFinder Office 2.9 and stored in the GeoExplorer 3 unit. The data dictionary file is titled “nightskiing” and has feature settings with a descriptive attribute; the most dominant attributes are set as a default.

"nightskiing", Dictionary, "craig way"
"track", line, "", 5, seconds, 1, Code
  "line", menu, normal, normal, Label1
  "nightski"

"post", point, "", 5, seconds, 1, Code
  "point", menu, normal, normal, Label1
  "light"

"rope", area, "", 5, seconds, 1, Code
  "area", menu, normal, normal, Label1
  "keep off"

"water", area, "", 5, seconds, 1, Code
  "area", menu, normal, normal, Label1
  "pond", default
  "marsh"

"trees", point, "", 5, seconds, 1, Code
  "point", menu, normal, normal, Label1
  "conifer"

"building", area, "", 5, seconds, 1, Code
  "area", menu, normal, normal, Label1
  "outback ski shack", default
  "grouse mtn lodge"
  "restroom"

"elevation", point, "", 5, seconds, 1, Code
  "point", menu, normal, normal, Label1
  "hilltop", default
  "valley"

"lot", area, "", 5, seconds, 1, Code
  "area", menu, normal, normal, Label1
  "parking"

"tunnel", line, "", 5, seconds, 1, Code
  "line", menu, normal, normal, Label1
  "grattan's shaft"
PFOffice is used to take satellite data files and differentially correct them; the software has map features that can be exported into other programs. I select the rover files (.ssf) and do an internet search, with PFOffice, and select base files. The correction base station is Polson 1 MT and is the local provider. Polson 1 has a latitude of 47-39-50 North, a longitude of 114-06-50 West, and an elevation of 974 meters (3197 feet). I exported the corrected files as .dxl and imported them into AutoCAD.

Uncorrected GPS files map from PathFinder Office(.ssf)
The maps from PFOffice are filled with more information than the edited map I made in AutoCAD. Some mapping points did not show up in the CAD drawing and much cleaning up was needed; some layers needed to be purged. Problems out in the field occurred when collecting features with question marks for attributes; the best way to fix this problem is to collect all distinct attributes with their own feature as default attributes. Getting to know the GeoExplorer 3 a little better may be in order; that may require Extra Sensory Perception or a direct hardline connection to my brain, via the earhole, with the unit. The main feature of this project, the night ski track, stayed in tact and exported to CAD; this feature is the first that was collected in the two days of mapping. Four files were opened and one of those was not corrected; I assume this file has some lost information. I could not get my features on top of the Digital Ortho Quad in ArcView, even with the tutorial help of a fellow student who had the same problem.
The data that is collected, although compromised, shows how easy the night ski track is to find. A person can choose to skate or cross country ski the groomed course; they may also choose to use snowshoes and hike. This track is the only continuously lit up area that I know of where people can go out at night and be in a natural setting. Big Mountain is lit up on weekends, but only for stressful downhill skiing. The night ski track at Whitefish Lake Golf Course is a great way to release some stress after work and for people who are short on time during these short wintertime days.