



Permutations for heading/distance.

Start ball -> Start flag: 265°T 272°M 0.10 nm
Start ball -> Gosling: 036°T 043°M 0.79 nm
Start ball -> Rum: 354°T 001°M 1.00 nm
Start ball -> 8: 298°T 305°M 1.56 nm
Start ball -> 10: 292°T 299°M 1.12 nm
Start ball -> 12: 280°T 287°M 0.71 nm
Start ball -> 2: 098°T 105°M 1.02 nm
Start ball -> Manatee 1: 021°T 028°M 1.87 nm
Start ball -> Manatee 2: 011°T 018°M 2.15 nm
Start flag -> Start ball: 085°T 092°M 0.10 nm
Start flag -> Gosling: 041°T 048°M 0.86 nm
Start flag -> Rum: 360°T 007°M 1.00 nm
Start flag -> 8: 300°T 307°M 1.48 nm
Start flag -> 10: 294°T 301°M 1.04 nm
Start flag -> 12: 282°T 289°M 0.62 nm
Start flag -> 2: 097°T 104°M 1.12 nm
Start flag -> Manatee 1: 023°T 030°M 1.92 nm
Start flag -> Manatee 2: 013°T 020°M 2.17 nm
Gosling -> Start ball: 216°T 223°M 0.79 nm
Gosling -> Start flag: 221°T 228°M 0.86 nm
Gosling -> Rum: 302°T 309°M 0.67 nm
Gosling -> 8: 273°T 280°M 1.85 nm
Gosling -> 10: 262°T 269°M 1.52 nm
Gosling -> 12: 246°T 253°M 1.27 nm
Gosling -> 2: 145°T 152°M 0.96 nm
Gosling -> Manatee 1: 010°T 017°M 1.13 nm
Gosling -> Manatee 2: 357°T 004°M 1.47 nm
Rum -> Start ball: 174°T 181°M 1.00 nm
Rum -> Start flag: 180°T 187°M 1.00 nm
Rum -> Gosling: 122°T 129°M 0.67 nm
Rum va-> 8: 258°T 265°M 1.31 nm

Rum -> 10: 239°T 246°M 1.10 nm
Rum -> 12: 214°T 221°M 1.05 nm
Rum -> 2: 135°T 142°M 1.59 nm

Rum -> Manatee 1: 045°T 052°M 1.08 nm
Rum -> Manatee 2: 024°T 031°M 1.22 nm
8 -> Start ball: 118°T 125°M 1.56 nm
8 -> Start flag: 120°T 127°M 1.48 nm
8 -> Gosling: 093°T 100°M 1.85 nm
8 -> Rum: 078°T 085°M 1.31 nm
8 -> 10: 132°T 139°M 0.46 nm
8 -> 12: 131°T 138°M 0.91 nm
8 -> 2: 110°T 117°M 2.55 nm
8 -> Manatee 1: 063°T 070°M 2.29 nm
8 -> Manatee 2: 052°T 059°M 2.26 nm
10 -> Start ball: 112°T 119°M 1.12 nm
10 -> Start flag: 114°T 121°M 1.04 nm
10 -> Gosling: 082°T 089°M 1.52 nm
10 -> Rum: 059°T 066°M 1.10 nm
10 -> 8: 312°T 319°M 0.46 nm
10 -> 12: 131°T 138°M 0.45 nm
10 -> 2: 105°T 112°M 2.13 nm
10 -> Manatee 1: 052°T 059°M 2.16 nm
10 -> Manatee 2: 040°T 047°M 2.22 nm
12 -> Start ball: 100°T 107°M 0.71 nm
12 -> Start flag: 102°T 109°M 0.62 nm
12 -> Gosling: 066°T 073°M 1.27 nm
12 -> Rum: 034°T 041°M 1.05 nm
12 -> 8: 311°T 318°M 0.91 nm
12 -> 10: 311°T 318°M 0.45 nm
12 -> 2: 099°T 106°M 1.73 nm
12 -> Manatee 1: 040°T 047°M 2.12 nm
12 -> Manatee 2: 029°T 036°M 2.27 nm
2 -> Start ball: 278°T 285°M 1.02 nm
2 -> Start flag: 277°T 284°M 1.12 nm
2 -> Gosling: 325°T 332°M 0.96 nm
2 -> Rum: 315°T 322°M 1.59 nm
2 -> 8: 290°T 297°M 2.55 nm
2 -> 10: 285°T 292°M 2.13 nm
2 -> 12: 279°T 286°M 1.73 nm
2 -> Manatee 1: 349°T 356°M 1.92 nm
2 -> Manatee 2: 345°T 352°M 2.33 nm
Manatee 1 -> Start ball: 201°T 208°M 1.87 nm
Manatee 1 -> Start flag: 203°T 210°M 1.92 nm
Manatee 1 -> Gosling: 190°T 197°M 1.13 nm
Manatee 1 -> Rum: 225°T 232°M 1.08 nm
Manatee 1 -> 8: 243°T 250°M 2.29 nm

Manatee 1 -> 10: 232°T 239°M 2.16 nm
Manatee 1 -> 12: 220°T 227°M 2.12 nm
Manatee 1 -> 2: 169°T 176°M 1.92 nm
Manatee 1 -> Manatee 2: 323°T 330°M 0.44 nm
Manatee 2 -> Start ball: 191°T 198°M 2.15 nm
Manatee 2 -> Start flag: 193°T 200°M 2.17 nm
Manatee 2 -> Gosling: 177°T 184°M 1.47 nm
Manatee 2 -> Rum: 204°T 211°M 1.22 nm
Manatee 2 -> 8: 232°T 239°M 2.26 nm
Manatee 2 -> 10: 220°T 227°M 2.22 nm
Manatee 2 -> 12: 209°T 216°M 2.27 nm
Manatee 2 -> 2: 165°T 172°M 2.33 nm
Manatee 2 -> Manatee 1: 143°T 150°M 0.44 nm

and these are the coordinates I have for the marks

GOSLING_MARK_LAT

=

float(28.829650)

GOSLING_MARK_LON

=

float(-81.253192)

RUM_MARK_LAT =

float

(28.83552)

RUM_MARK_LON =

float

(-81.26393)

MARK_8_LAT = float(28.831043085081017)

MARK_8_LON = float(-81.28830115197285)

MARK_10_LAT = float(28.825959845253458)

MARK_10_LON = float(-81.28180366329701)

MARK_12_LAT = float(28.821036)

MARK_12_LON = float(-81.275250)

MARK_2_LAT = float(28.816651)

MARK_2_LON = float(-81.242706)

MAN_1_LAT = float(28.848144674600853)

MAN_1_LON = float(-81.24938755140792)

MAN_2_LAT = float(28.854083532042917)

MAN_2_LON = float(-81.2544414564736)

START_FLAG_LAT = float(28.818843)

START_FLAG_LON = float(-81.263818)

START_BALL_LAT = float(28.818992)

START_BALL_LON = float(-81.261995)