```cpp
// gyro.cpp: Gyro utilities that provide ease of access to the robot's rotation
// and manipulation of this rotation
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//
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#include "../include/main.h"

namespace gyro {
  void drive::task(void* none) {
    float change[2] = {0};
    while (on) {
      changer = (abs(gyro->value() - iHeading) - tolerance) * urgency;
      if (gyro->value() > iHeading + tolerance) {
        change[0] -= changer;
        change[1] += changer;
      } else if (gyro->value() < iHeading - tolerance) {
        change[0] += changer;
        change[1] -= changer;
      }
      pid::request(change[0], change[1]);
      delay(50);
    }
  }

  void drive::off(void) {
    on = false;
  }

  drive::drive(int heading, float urgency, bool absolute, sensors::gyro_t* gyro,
               unsigned int tolerance)
      : heading(heading),
        urgency(urgency),
        gyro(gyro),
        iHeading(absolute ? heading : heading + gyro->value()) {
```

```
  }
} // namespace gyro
```