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        // Find angle to aim
        relativeAngle = getRelativeAngle();
        // Aim at that angle
        turnRelative(relativeAngle,-1);
        // Once we're aimed, go to step 1
        if (abs(relativeAngle) < 1)
            fireState = 1;
        break;
    default:
        break;
}

// Manual button to move catapult up
if (controller.get_digital(BTN_CAT_UP)) {
    // Clear auto-flags and set speed
    catSpeed = -127;
    fireState = -1;
    catSeek = -1;
}

// Manual button to move catapult down
if (controller.get_digital(BTN_CAT_DOWN)) {
    // Clear auto-flags and set speed
    catSpeed = 127;
    fireState = -1;
    catSeek = -1;
}

// Button to fire w/o aiming
if (controller.get_digital(BTN_FIRE)) {
    // Set flags, go to fireState 1
    aimFire = false;
    fireState = 1;
}

// Button to fire w/ aiming
if (controller.get_digital(BTN_FIRE_AIM)) {
    // Set flags, go to fireState 20
    aimFire = true;
    fireState = 20;
}

// Button to abort auto-funtion
if (controller.get_digital(BTN_ABORT)) {
    // Clear auto-flags
    fireState = -1;
    catSeek = -1;
}

// Button to draw catapult w/o firing
if (controller.get_digital(BTN_TOGGLE)) {
    // Go to fireState 10
    fireState = 10;
}

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    }

    // If we want to seek a position, run motors proportional to
    // distance
    if (catSeek >= 0) {
        catSpeed = (catSeek - catPos);
    }

    // Set motors on catapult
    cat_1.move_voltage(catSpeed * 12000 / 127);
    cat_2.move_voltage(catSpeed * 12000 / 127);

    pros::delay(20);    // don't hog cpu
}
}

```