

CLEARSCREEN.

SET THROTTLE TO 1.0.

WHEN SHIP:MAXTHRUST = 0 THEN {

 STAGE.

 PRESERVE.

}.

SET MYSTEER TO HEADING(90,90).

LOCK STEERING TO MYSTEER.

WAIT UNTIL STAGE:SOLIDFUEL < 0.1.

STAGE.

Local DesiredTarget is 75000.

UNTIL SHIP:APOAPSIS > DesiredTarget {

 local DesiredHeading is $90 * (1 - \text{SHIP:ALTITUDE} / \text{DesiredTarget})$.

 SET MYSTEER TO HEADING(90,DesiredHeading).

}.

UNTIL SHIP:PERIAPSIS > (DesiredTarget - 4000) {

 IF SHIP:APOAPSIS > (DesiredTarget*1.01) {

 SET MYSTEER TO HEADING(90,-2*(15+SHIP:APOAPSIS/DesiredTarget)).

 } ELSE {

 SET MYSTEER TO HEADING(90,-7).

 }.

}.

SET THROTTLE TO 0.0.

function absang {

 parameter obt.

 Return mod(obt:lan + obt:argumentofperiapsis + obt:trueanomaly, 360).

}

function norm {

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        parameter ang.
        Return mod(ang, 360).
    }
function ang_diff {
    parameter a0.
    parameter a1.
    set a0 to norm(a0).
    set a1 to norm(a1).
    return mod(a0 - a1,360).
}
local mun_ang is absang(mun:orbit).
local ship_ang is absang(ship:orbit).
local burn_ang is norm(mun_ang + 235).
local d_theta is ang_diff(burn_ang, ship_ang).
local orbit_rate is ship:orbit:period / 360.
local burn_time is d_theta * orbit_rate.
print burn_time.
Wait burn_time.
SET MYSTEER TO HEADING(90,5).
SET THROTTLE TO 1.0.
UNTIL (SHIP:APOAPSIS - MUN:ORBIT:APOAPSIS) > 1000 {
    SET THROTTLE TO 1.0.
}
UNTIL SHIP:ALTITUDE < 10000 {
    SET THROTTLE TO 0.0.
}
UNTIL SHIP:VERTICALSPEED > -5 {
    SET MYSTEER TO HEADING(90,90).
    SET THROTTLE TO 1.0.
}

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}
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```
SET THROTTLE TO 0.0.
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