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-SHIP:ALTITUDE/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 {

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.

}

SET THROTTLE TO 0.0.