

Delta V Nomogram v01

Lay straightedge between any two known values and read the unknown value where edge crosses the scale.

$$\Delta V = V_e \ln(R)$$

In the delta V scale:

Hohman are minimum-delta-V, maximum-duration impulse trajectories. I-3 are impulse trajectories near the transition between delta-V levels for high impulse trajectories and low brachistochrone trajectories.

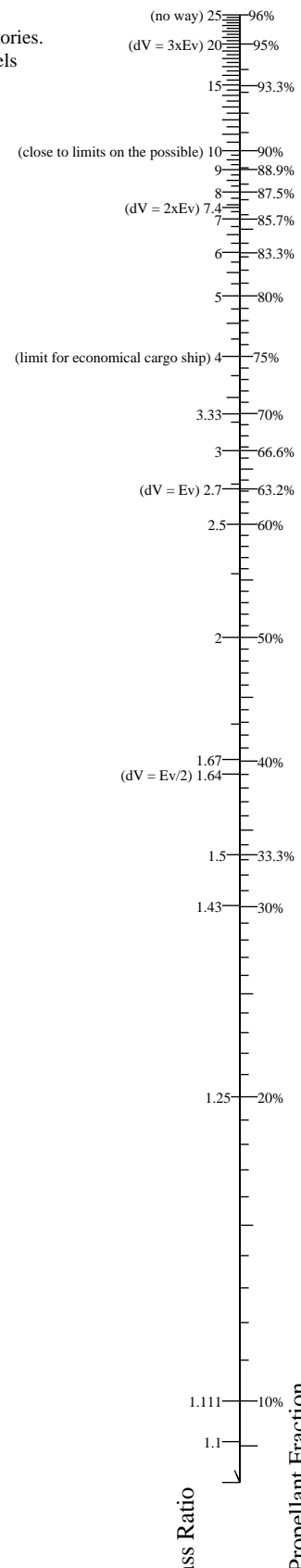
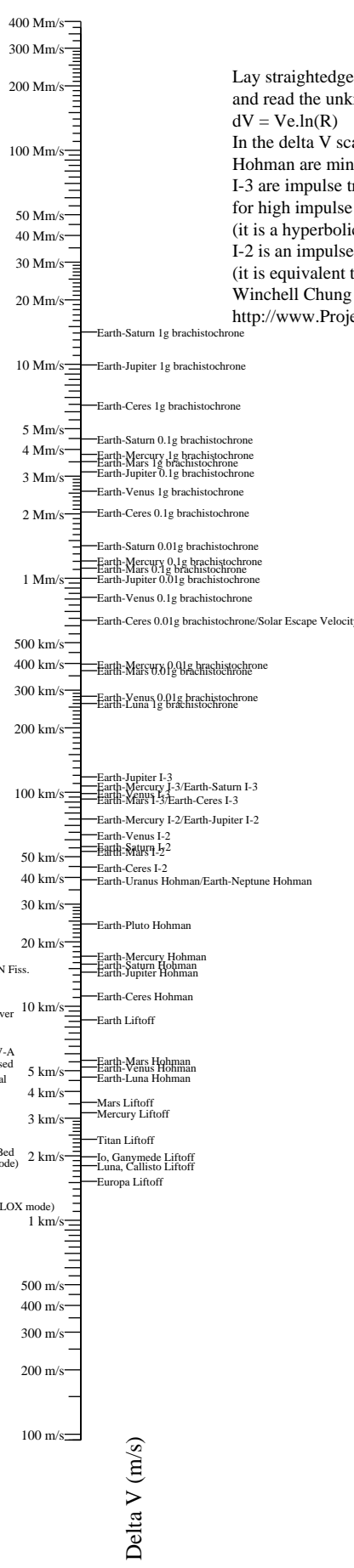
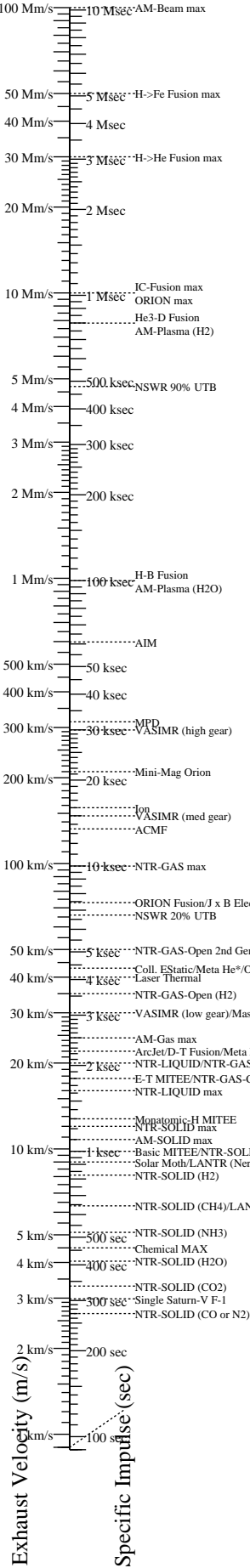
(it is a hyperbolic solar escape orbit plus 30 km/s).

I-2 is an impulse trajectory in-between Hohman and I-3

(it is equivalent to an elliptical orbit from Mercury to Pluto)

Winchell Chung (Nyrath the Nearly Wise)

<http://www.ProjectRho.com/rocket/index.html>



Exhaust Velocity (m/s)
Specific Impulse (sec)

Delta V (m/s)

Mass Ratio
Propellant Fraction