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function [ delta_v ] = rendezvous( r_circ , r_e , mu , ta_lead , n )
%Calculates the delta-v needed for dragon and ISS to rendezvous
    T_ISS = 2 * pi * ( r_circ ^ 3 / mu ) ^ .5 ; %Period of the orbit
of ISS
    T_ab = T_ISS * ( ta_lead / ( 2 * pi ) ) ; %time ISS leads dragon
by
    T_phasing = T_ISS - T_ab / n ; %Period of phasing orbit
    a_phasing = ( mu * ( T_phasing / ( 2 * pi ) ) ^ 2 ) ^ ( 1 / 3 );
%semi-major axis of phasing orbit
    %Check for hitting earth
    danger = .5 * r_circ + r_e ;
    if a_phasing <= danger
        disp( 'You messed up and hit earth' )
    end
    se_phasing = - mu / ( 2 * a_phasing ); %specific energy of
phasing orbit
    v_phasing = ( 2 * ( ( mu / r_circ ) + se_phasing ) )
^ .5 ; %velocity of phasing orbit at apogee
    v_circ = ( 2 * ( mu / ( 2 * r_circ ) ) ) ^ .5 ; %velocity of
circular ISS orbit
    delta_v = 2 * ( v_circ - v_phasing ) ; %total delta-v
end

```

*Not enough input arguments.*

*Error in rendezvous (line 3)*

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    T_ISS = 2 * pi * ( r_circ ^ 3 / mu ) ^ .5 ; %Period of the orbit
of ISS

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