

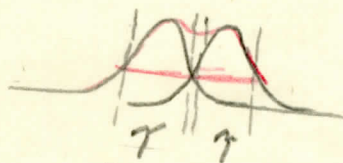
1
 Rocket ballistics cannot be pinned down -
 From available information it looks as if
 50+ ft. would be a reasonable figure -
 2500'/sec seems to be low final vel. 3000'/sec
 seems more reasonable Figure -

this would give $0.14 \times 10^{-3} \text{ sec} \times 3.0 \times 10^3 \text{'/sec} = 42'$

Pulse wise $\frac{42'}{490 \text{'/usec}} = .086 \text{ usec}$

assuming it were $\frac{50'}{490 \text{'/usec}} = .1 \text{ usec}$

There will be some loss due to restricted
 (B) causing slope in rise time of pulse



if 1/2 voltage pts on adj. pulse meet. pulses
 will merge -

4

Resolution of scope = $\frac{\text{beam width}}{\text{sweep length (dist)} \times \text{sweep length (time)}}$

trace of 5XP11 $\approx 1 \text{ mm}$.

Useful width $\approx \frac{25 \text{ mm}}{\text{in}} \times 4 \text{ in} = 100 \text{ mm}$.

resolution = $\frac{1 \text{ mm}}{100 \text{ mm}} \times \text{sweep time} -$

With sweep time of $5 \mu\text{s}$ res. = $.01 \times 5 \mu\text{s} = .05 \mu\text{sec}$

this is within system limits -