Intro to Radar Systems HW7

8-17)

PRF = 5kHz

PRT = 1/PRF= 0.0002 s

**Rmax= C(PRT-PW)/2=30 km**

Ractual= 50 mi \* 1.609 = 80.45 km

**N= R/Rmax = (160.9/2)/30 = 3 pulses**

**RA = R\*MOD((C\*PRT)/2) = 20.45 km**

8-19)

PRF = 2(Vr/c)ft

3 kHz = 2(Vr/3\*108)\*10 GHz

**Vr= Vua = 45 mph**

PRT =1/(3\*103) = 3.3\*10-4 s

**Rua = C(PRT-PW)/2 = 50 km**