

Q1) Keys = Registration Number, Model Number SSN, FAA_Num, Date

Employees don't necessarily only work as a technician or traffic controller and the airport probably doesn't only hire these two employees therefore this **is** a covering constraint and **not** an overlapping constraint

Planes must be of some model and can only be one model and many models can have many planes therefore planes have a key and covering constraint and total participation.

Technicians can be experts in many models and one model can either have many experts or none. Therefore technicians have total participation since they all have at least one expertise and no key constraints

Q2) You would use a binary relationship using entities technicians and tests that associate with a testing_plane relationship