

**Air Traffic Control Homework**

Students must complete ONE of the following FOUR options

- 1) ATC Exam
- 2) VATSim simulation
- 3) Sector 33 App
- 4) Chicago Flights

**1) ATC Exam.**

Air Traffic Controllers must demonstrate skills to think in 3 dimensional space. These test ATC test questions identify those candidate controllers that have this ability. Keep in mind, the controllers must do these task without the aid of paper, pencil and calculator.

Show all work. Provide explanations. Use of calculator approved.

**Practice Quiz**

Radar Screen #65

Aircraft Information Table			
Ident.	Altitude (Feet)	Speed (mph)	Route
28	13000	540	GURSD
17	10000	300	DSRUTWL
38	12000	360	KXWTURF
59	13500	240	FRQP
71	13000	360	NTWXX
93	11000	240	NTUG
15	11000	300	FRUTWXX
26	10500	300	LWTQA
48	11500	300	MWXYH
60	12000	240	NTQB
82	12500	300	PQRUYJ
04	13500	300	KXURSD

**Which aircraft fly on opposite routes?**

15-38     
  17-38     
  15-17     
  15-28

### Practice Quiz

Radar Screen #65

Aircraft Information Table			
Ident.	Altitude (Feet)	Speed (mph)	Route
28	13000	540	GURSD
17	10000	300	DSRUTWL
38	12000	360	KKWTURF
59	13500	240	FRQP
71	13000	360	NTWXX
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60	12000	240	NTQB
82	12500	300	PQRUYJ
04	13500	300	KXURSD

**Which aircraft are in conflict?**

38-82    
  Both 1 & 2    
  59-82    
  None of the above

### Practice Quiz

Radar Screen #65

Aircraft Information Table			
Ident.	Altitude (Feet)	Speed (mph)	Route
28	13000	540	GURSD
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04	13500	300	KXURSD

**The time is 00:47. What time will Aircraft 15 and Aircraft 38 pass each other?**

00:52    
  00:54    
  00:53    
  00:55

## 2) VATSim

Go to website <http://www.vatsim.net/>.

Download necessary Apps and Register as pilot, ATC, or observer.

- a. Provide a written step-by-step description of the process to register, install and configure VATSim

- b. Provide a written description (with screen shots) of the users tasks (wither pilot, ATC, observer).

VATSim Youtube videos:

<http://www.youtube.com/watch?v=QVUDryTilBU&feature=related>

Tutorial #1 Intro and Set-up <http://www.youtube.com/watch?v=Ph5uvwlh5Wk&feature=related>

Tutorial #2 Route Planning <http://www.youtube.com/watch?v=qKMv6TI2lZQ&feature=related>

Tutorial #3 Preparing for First Flight

<http://www.youtube.com/watch?v=LkGvMSHdvnU&feature=related>

Tutorial #4 Charts <http://www.youtube.com/watch?v=cUaiV6jFTMU&feature=related>

Tutorial #5 Live ATC Communications: <http://www.youtube.com/watch?v=yBF6-PFGwFU&noredirect=1>

### 3) **Sector 33 App.**

Download "Sector 33" app from the Apple's [app store](#). The download is FREE. The app is compatible with the iPad, iPhone, and iPod Touch

The app allows the player to work a sector of airspace spanning Nevada and California, adjusting each airplane's path and speed to move as fast as possible while maintaining separation and avoiding thunderstorms.

The [game](#) is part of the Smart Skies educational software project developed by NASA's Aeronautics Research Mission Directorate with cooperation from the FAA and the National Air Traffic Controllers Association.

- a. Provide a written of the goals of the app.
- b. Provide a written description (with screen shots) of the users tasks

### 4) **Chicago Flights**

Go to website <http://chicagoflightsfsx.com>

Register and participate.

- a. Provide a written step-by-step description of the process to register, install and configure Chicago Flights
- b. Provide a written description (with screen shots) of the users tasks