

1. Get ATIS early. Why early? ATIS is the key to the terminal area. Without that key, you will never open that door to it. So why not open it as early as possible to see what's inside? For one thing, you might not like what you find; in which case you can make a decision earlier rather than later to bypass your destination for your alternate. Remember, the last one to the alternate runs out of gas in holding while all the other planes that diverted there before you land!

For these canned sim events, there is no doubt where you will be going or what approaches you will be doing. The weather will magically be conducive to the approaches you are doing for that event. In real life however, you need ATIS to figure out what approaches you can do based on the info in the ATIS. The 100 mile number in the FTI is to guarantee you're within range. For these round robin flights, where you are never really outside the area where you can physically pick up ATIS, you have to identify an opportune time to get it. I suggest 3 spots; an early, optimal, and late spot to get ATIS. Identifying these spots on your route will keep you on task and help you prioritize (i.e if you get to the late spot and haven't checked ATIS yet, you know you have to hustle). Now the question arises, can you get ATIS too early? Yes, you have to be aware that getting it early might mean it updates before you get to the terminal area. If you know that will happen, update your IP with the new ATIS changes when you get the update. ATIS normally updates at 55 past the hour, or more often if the weather is changing rapidly.

I have some other techniques for ATIS too, but I will save those for our face to face.

2. The communicate of "aviate, navigate, communicate". You guys are constantly doing admin tasks and running numbers and giving briefs throughout the flight. Those things can create a lot of heads down time and cause you forget the aviate and distract you from the navigate. As a result, you need to constantly be "recycling" the idea of aviate, navigate, communicate. For instance, if I am about to give my field brief, I probably just got ATIS which means I probably was copying down the info and not paying attention to the Aviate or the Navigate. BEFORE you give that field brief, recycle back to aviate. Check your altitude and airspeed. If off, correct. If/when they are good, transition to navigate. Check that point to point or direct to the VOR to make sure it is still good. If off, fix it. If/when it's good, move on to the communicate and give your field brief. If in the middle of the field brief, you get a radio call for a descent, stop the field brief and respond to the call. Initiate descent and then recycle the aviate and the navigate. If it was a descent from 170 to 060, you probably have time to do the aviate and the navigate, initiate the descent checks and still finish the field brief before you get to your level off. BUT, if that descent was from 170 to 150, maybe you should hold at aviate while you do the descent, so that you don't start back in on your field brief and miss the level off. If distracted, recycle. If heads down for a periods of time, recycle. If interrupted, recycle. This will keep you on task with your priorities in order.

3. Verbalize your 6 T's! The biggest thing you can forget on an approach is the gear. If you do your 6 T's out loud, you should not ever forget to do that. Why, because you can make that last "T" for "Talk" mean not only talk to tower, but spit out my before landing checks. I've seen plenty of students get distracted and either forget to configure or configure but get stopped half way through

doing their BLC's. In addition, start your clock at the FAF every time, no matter if the approach has timing or not. The quicker you guys build in the muscle memory to do that, the less likely you will be to forget to do it when you need it.

4. Set trip wires for yourself. If you haven't dropped the gear and don't want to forget, put your hand on the gear handle (Be especially cognizant of not actuating it though!). If you don't want to miss a level off, point at the altimeter. After a while, you'll wonder what the hell you are doing and be reminded of what you didn't want to forget. It sounds dumb, but it works.

5. Get good at PTP's. Practice until you are blue in the face. You want to get to the point where you can quickly analyze the needles and it doesn't suck all your brain power away from other things you need to be doing. The only way to do this is practice.

6. Memorize your quick checklists. Before landing checks, after takeoff checks, Ops check, climb checks, 18 K checks, descent checks. If you have to consult your kneeboard every time you have to do these checks, for the same reason as above, you will waste time and brain power unnecessarily which will hinder your efficiency. Am I telling you to never consult a checklist. NO. Am I saying it will help if you have it memorized. YES. NOTE: this does not apply to any ground checks.

7. Wave off/go missed approach according to "aviate, navigate, communicate." When initiated, be explicit! SIR/MAM, WO WO WO/EXECUTE MISSED/EXECUTE CLIMB OUT. Then, AVIATE: Get power on the bird and start climbing, 2 positives-GEAR, 110-FLAPS, Clean below XX airspeed. NAVIGATE: SIR/MAM, turn heading XXX, climb maintain XXXX (Whatever the climb out or missed approach instructions were/are). COMMUNICATE: THEN talk to tower and say: KATT XXX executing climb out/waving off/executing missed approach.

NOTE 1: Do not switch yourself off of tower. Tower will switch you to approach.  
NOTE 2: Do not say "executing missed approach" unless you are in fact executing missed approach. If you are waving off because there is a plane on the runway, you are waving off. If you just did a low approach, you are executing climb out. You only say executing missed if you get to the MAP or DH and do not have the field in sight. In real life, people start getting worried if you say you're going missed. They think something is wrong.

8. When getting vectored for an approach, get the nav aids set up for the approach immediately! You should literally feel a giant mental weight is lifted off of your shoulders when you hear the sweet words: "KATT XXX, turn heading blah blah blah, this will be vectors for whatever". Why, because it means you don't have to actively navigate anymore! That does not mean you don't have to keep track of where you are at though! Just like above, get your aviate and your navigate set up before you go into your approach brief. The last thing IP/Sim instructors want to hear is the approach brief when there is nothing set up for the approach. Understand that they are vectoring you to final, so you need to be able to "read" the approach in order to maintain SA. With the nav aids and FAC set into the HSI, you will be able to keep track of where you are on those vectors (i.e. where you need to start slowing and when to configure).

NOTE: you will not always get a proper downwind leg or base leg, so pay attention to where you are and adjust accordingly.

9. The format for vectors to final approach course (LOC, ILS, VOR, etc.) is P.T.A.C.

POSITION: You are X miles from the FAF (This is advisory only and you do not need to repeat it).

TURN: Turn heading XXX (this will usually be no more than 30 deg from FAC). So if FAC is 270 Deg, and you are on a base leg going north, you should hear no more than a 300 deg intercept heading.

ALTITUDE: It will be 1 of 2 altitudes, whatever is on the approach plate for the FAF altitude or whatever you are currently at.

CLEARANCE: Whatever you probably just asked for 5 minutes ago, i.e. whatever you asked to get vectors for.

Long story short, you now know the format, and you can see that you can either estimate or already know all the information in the clearance. Learn this format and don't let it trip you up. In addition, the response does not have to be totally parroted. The numbers and the clearance are the big things. Example:

Approach: (P) KATT 619, you're 5 miles from DAGEY, (T) turn left heading 300, (A) maintain 2 thousand until established, (C) cleared ILS 30.

YOU: KATT 619, left 300, 2000 'til established, cleared ILS 30.

10. The format for circling instructions (given by tower after your initial check-in on the approach) are:

1. KATT XXX, CIRCLE in some direction on the compass (SW, NE, S, W, etc.)
2. For some pattern leg (Left base, right downwind, etc.)
3. Cleared for whatever you asked for on your initial check-in (T&G, Full Stop, Option, Low approach).

NOTE: If they only give you the first 2, it means they are precluded from giving you the clearance for some reason (i.e. there is someone else already cleared to land or there is somebody in the pattern already that you will be following or there is someone on the runway taking off, etc). Whatever it is, understand that you do not have clearance yet and will need to ask for it at a normal pattern checkpoint like we did in Contacts (downwind, abeam the tower, 180, etc).

After you repeat the instructions, once you are in the maneuvering radius for class B aircraft (1.5 miles) you will then direct the IP to maneuver according to those instructions.

I hope this helps. Please come with questions on this or anything else.