The IFR Burger

What is an IFR flight? It is the exact opposite of what VFR is. In VFR proper separation from clouds and bad weather must be maintained at all times but with IFR, those separations may be broken because the pilot is flying a filed flight plan along a route.

Another big difference between VFR and IFR is the fact in IFR, you are under ATC control the whole time. This does have its advantages, such as they can spot out traffic for you.

ZLA airspace has been the home of many of the recent flights, like the VOR Burger and the Swarm. The vZLA have been very helpful in getting many new pilots on VATSIM and helping them through the basics of VFR flight. Now we are going to turn to ZLA once again for IFR.

(I highly recommend flying this on VATSIM as it will create a much more realistic IFR environment.)

(I also recommend that you fly the VOR hamburger and understand the concepts behind it, as this flight will draw on many of those concepts.)

**Pre-Flight Briefing**

Today's flight will be an IFR filed flight from Burbank (KBUR) to Santa Barbra (KSBA). We have two options for pilots here, we can go /A where we will only use the VOR/DME equipment on board the aircraft or we can go /G where we will load a flight plan into the GPS. (Both FS9 and FSX flight plans for flight are included that can be loaded in within the sim.) As for weather, let’s use real world weather. IFR flight plans are often filed event when its nice a day.

Here is the flight plan:
FIM.V186.DEANO.V27.KWANG
Cruise Altitude: 6000 ft.
ZLA Tech Route: BURN39

That routing there may seem complex but lets break it down. First is the FIM VOR also known as Filmore. This is the first point on our routing. After that is a Victor airway. Victor airways are rather interesting. Just like any airway, a Victor airway is a line of waypoints all strung together in a row to get to another waypoint, in this case, DEANO. Confused, well lets have a look at this picture.

The black line is V186, the first of our victor airways. As we see, DEANO lies on the FIM 250 Radial and the 27DME. At 17DME we cross over HENER, another waypoint.
on the routing. At 27DME we have successfully reached DEANO. After DEANO, we
must join V27, another victor airway that actually lies on the same radial we were flying,
so just continue on the 250R from FIM until 32DME, which is KWANG. After KWANG
we will be vectored for approach. If not assigned by ATC, we should request the ILS
runway 07 unless unable to do so due to weather.

Got it all? Lets get out to the flight line!

**Filing a Flight Plan**
From the information above we can now file a flight plan. Here is all the info required.
DEP: KBUR
ARR: KSBA
ALTN: KIZA
RTE: FIM.V186.DEANO.V27.KWANG
CRZ ALT: 6000 ft.
AIRCRAFT TYPE: ZZZZ/A or ZZZZ/G. A or G depends on if you are using the GPS.
Replace ZZZZ with your aircraft type. If it’s a C172 with GPS, it would look like
C172/G.

**Clearance**
One the flight plan is sent we should now load up the aircraft to the configuration we
want it in. Once ready call for your IFR clearance. This will sound something like this:

“Burbank Tower, N123AB IFR Santa Barbara, Information Alpha.”
“N123AB, Burbank Tower, Cleared to Santa Barbara radar vectors Filmore then as filed.
Maintain 6000, departure will be on 124.600 and Squawk 1234.”
“Cleared to Santa Barbara Squawk 1234, 3AB.”
“3AB read back correct call when ready for taxi.”
“Will call, 3AB.”

A lot just happened so let us break it down. The initial call was letting tower know that
you wanted your IFR clearance to SBA. Their response was your clearance. Radar
vectors Filmore means you will receive vectors by the radar controller to Filmore.
Maintain 6000 means what is sounds like, climb and maintain 6000. 124.6 is the
departure frequency we will tune to once airborne. And the squawk code was 1234.
WRITE YOUR CLEARANCE DOWN. I can’t say that enough make sure you write it
down as it is said so you can reference it later and is easier to read back.

**Taxi**
This is pretty strait forward, taxi to the runway assigned by ATC.
Be sure to pre tune FIM 112.50 into your NAV1 radio before departure!

And check to see if you are getting a DME reading!

**Takeoff and departure**
Takeoff will be pretty standard, just follow the instructions given. You may receive an instruction like “fly heading 120 runway 15 cleared for take.” In that case as soon as you are airborne make the turn to heading 120. Tower should tell you to switch to departure, in this case 124.600. Once they identify you they will probably assign you a heading that will take you direct to FIM. Comply with all of their instructions.

After takeoff, comply with all instructions, in this case we were assigned heading 340.
If properly aligned, your gauge will look something like this going to direct FIM.

**In flight**
So let's say you just passed over Filmore, now we must join the 250 radial outbound. In the OBS1 gauge, turn it to 250 and line the arrow up in the middle of the gauge by moving the aircraft. Very much like tracking direct to a VOR, only we have to move to the arrow, we can’t move the arrow to us.

Notice how the OBS course arrow is aligned to 250 and we are tracking that course exactly? That’s flying a victor airway!

Overhead DEANO. Notice the 27 DME reading and the 250 course.
Overhead KWANG. Notice 32DME and 250 course.

**Arrival**
After KWANG we can expect vectors to ILS 07. If not assigned ILS 07, request it. Fly the assigned headings and altitudes and fly the ILS. Make sure to tune your nav radio off FIM and onto the ILS freq. 110.30. and set your OBS Course to 075, the inbound course for ILS runway 07.

On the ILS. Notice the Localizer is nearly perfectly aligned and the arrow. Also, look at the other arrow on the left side of the gauge. That is the glide slope. Track both by moving the aircraft and they will take you all the way down to the runway.

Once clear of the runway squawk Standby and give your self a pat on the back. You have successfully done an IFR flight.

If any of these directions leave question in your mind, I do invite you to do your own research to find out more about the procedures done here.