



Fitting In

Light Aircraft at the Large Jetport

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Many of us in general aviation think of the big city airport as a good place to stay away from. We're not anxious to mix with jet traffic, and there are usually smaller airports nearby. Yet we know that light aircraft can and do fly in and out of these jetports when there is an occasion to do so. This being the case, what's it like? How can it be done without compromising safety and without incurring the ire of the controllers and the snickers of the jet captains?

The answer lies in the willingness of the pilot to do some planning and in the ability to fly the airplane in a professional manner in a busy IFR environment. There are, of course, some special things to watch for. However, you will notice that where special procedures are used, they are based on the same rules and regulations that apply everywhere, adapted to deal with high-density traffic. Indeed, some understanding of how things are handled around the big jetport will help a pilot

do a better job when things get busy around any tower-controlled airport.

What about qualifications? Technically, the airplane need only meet the requirements for communication and navigation in a TCA, and the pilot need only have a private license. However, in the practical situation, these minimums ought to be bettered substantially. The aircraft ought to be equipped for full IFR operation, and it should also be capable of maintaining a level speed of at least 120 knots indicated, preferably 130 knots. The pilot should have at least the level of competence represented by a commercial license with an instrument rating. All in all, as we shall see, at high-traffic airports things are a lot different from flying the pattern around the old pea patch.

A successful flight always begins with proper planning, and this is especially true of a flight to a big jetport. Try to start planning a few days early, beginning with a study of the approach charts

and the airport diagram to get the general lay of the land. Look especially for the location of the general aviation parking ramp; the biggest airports usually have only one small space reserved for this. It doesn't hurt, either, to call the FBO (or other parking authority) by telephone to get the facts on parking, fuel facilities, landing fees, etc.

Another reason for planning early is that you might need a reservation. Kennedy, LaGuardia, Washington National and Chicago-O'Hare have a system of quotas for IFR aircraft arrivals, as spelled out in FAR's 93.121 through 93.133 (reproduced in the *AOPA Handbook for Pilots*). The airports can handle more than these quotas under VFR conditions, but why take a chance? Reservations can be made up to 48 hours in advance of arrival, and a departure reservation can be made at the same time.

It is good practice to plan and file IFR for a couple of reasons. One is that it

Fitting In



gets you into the system from the start, so each controller will be expecting you. The other reason is simply that airports around big cities can often go below VFR minimums in haze and smoke—and most of them can't authorize Special VFR; so if it is important to get there, you really ought to be prepared for the weather. However, service is actually better for VFR operations in some cities—another reason to check in advance.

Another valuable trick is to write on a card or separate sheet of paper a list of all the published frequencies that may be used in the approach area. The list may look like this:

ATIS	135.15
Appr.	119.0
Tower	118.1, 120.75, 126.2
Ground	121.9, 121.75
Unicom	123.0

While you can expect other frequencies than these to be involved, particularly on approach, the list gives you something to run to if all else fails. So, when you hear approach say something like, "Tower now on one two *glee* point two" you go to 126.2.

Once en route, preparation should begin as much as 100 miles out from the destination. At this point, the light aircraft pilot can't be blamed for feeling a bit like Cinderella about to go to the prince's fancy ball, wondering if she can make her grand entrance without tripping over her gown. There are a couple of key items that help get "the grand entrance" off to a good start.

First, it's important to get the ATIS information early. Not only does this get it out of the way before things get busy, but it also clues the initial approach controller that here's a pilot who has been thinking ahead.

Second, you need to have in mind the indicated airspeed to be used during the approach phase—up to the final ap-

proach fix. This will be just about the first question you're asked, because it is key to the controller's strategy in fitting you into the flow of traffic. No, you're not expected to match the 160-odd knots of the jets, but it is appreciated if you can come up with 120 knots or more, even if this will require a fair amount of power. If you can respond to the airspeed questions promptly, it will again indicate you've been thinking ahead. Also, it's important to note that this controller deals with *indicated* airspeed, in knots, not true airspeed.

At this point, you are in a rapid-fire communications situation with headings, altitudes and airspeeds being given to all the aircraft. It is essential for the pilot to hear and respond to all calls. Make it a practice to tell passengers (if any) that you're going to be busy, and there'll be no further conversation. Even if the right-seat occupant is a fully qualified pilot, the possibility of assistance from this quarter is often outweighed by the negative possibility of mixups and distractions. So, unless the two people have considerable experience operating together as a crew, concentration by the pilot alone seems best.

As you get closer in, you can hear planes ahead of you being turned over to the tower. Sometimes it will be the standard, "Contact tower now on 118.6." But frequently the words will be something like: "Monitor (or switch to) tower on 118.6 and report reaching Romeo." There is a significant difference here, keyed to the word "monitor." In this case, you are supposed to switch—and to shut up—until you are called or until you reach the reporting fix. This keeps down the amount of talk on the tower frequency.

Passing over the reporting fix, you'll notice that it is a practice to report the name of the fix rather than just "the marker." After all, there may be two

or three approaches in use at the same time, and this confirms to the tower controller which one a particular aircraft is following.

The tower may ask if you can keep up your speed *beyond* the final approach fix. If you can't, you must stick with whatever speed will be safe. But have you ever tried a long straight-in ILS approach at 130 knots with the wheels in the wells, followed by a transition to landing configuration and speed in the last mile? It is not particularly hard to do, and it can help you feel a lot better when you have a jet rumbling along out there four miles behind you. But it's a procedure that should be practiced a few times at home before trying it in actual instrument conditions on final at O'Hare.

Aside from speed, the controller may also utilize the maneuverability of the light aircraft to fit it into the landing traffic flow, provided conditions are visual. This can result in some interesting procedures such as: a right descending 270 to a landing from a point 2,000 feet directly over the airport; a delaying 360 on short final; a 6,000-foot ear-popper plunge straight in from six miles out; and (an old favorite) a last-minute runway switch. Again, these maneuvers are not particularly difficult to do, but they do demand some understanding of the performance capabilities of the airplane.

On final, we normally think of ourselves as being pretty busy. But if conditions are visual and the final approach is long, it is possible to seize a chance to get ahead of things by getting out the airport diagram and comparing it with what you see before you. You can decide which taxiway you will shoot for in clearing the runway, and you can also get a general idea of which way you'll go to reach general aviation parking. These things are a lot easier to see from the air than they are when you're roll-

Fitting In

ing along an enormous runway with your nose five feet above the pavement.

You may want to plan a long landing, as at Dulles's Runway 19L where the first turnoff is more than half a mile from the threshold. Or you may want to land as short as you can, as at Washington National's Runway 15, which intersects to Runway 18; as soon as you can inform the controller you'll be holding short of the intersection he can then release other traffic on that runway.

Once on the ground, your job is to clear the runway promptly. But then you have to listen carefully, as the tower controller may want to take you across one or more parallel runways before you go to the ground controller.

On the ground, try to tell the controller what runway you've just cleared, what taxiway you're on (I wish they'd put letters on the *back* of those taxiway signs!) and where you're going. But then don't hesitate to say that you're unfamiliar with the airport. Any light airplane is more or less expected to be a newcomer. Ground controllers are usually very good about giving directions to small planes; they'd rather give directions than to have you stumbling onto the wrong taxiway, or worse, one

of the active runways.

One more bit of etiquette. Always acknowledge *specifically* any clearance or request that involves holding short of a particular runway. Controllers are very sensitive about this, and for good reason.

It is difficult to give much general advice about parking, as the situation varies so much among airports. Generally, it is a good idea to call on Unicom (123.0) when coming up on the ramp. Sometimes you'll get no response, but frequently you'll be asked to taxi around to some tiedown area. The ramp space directly in front of the office area is usually limited to a few minutes' use or for the elegant business jets.

Now the purpose for your trip is accomplished, and it's time for departure. Somehow the prospect of departure seems less forbidding than the arrival. By getting there at all you have already proved to yourself that you can deal with the congested terminal area, and now you will be going away from this and into a more familiar situation. Still, there will be a somewhat complicated set of radio procedures to go through in order to get on your way.

About the most helpful thing to do before starting is to listen for a few

minutes on the complete set of ground-based frequencies. These should include (in succession) ATIS, clearance delivery, gate hold (if applicable) and ground control frequencies. This gives an idea of how things are being handled each step of the way, so that when you're going through the steps yourself you'll know what to expect.

Most departures are IFR (and again this is recommended). Many large airports have now gone to a "common" SID procedure, where the SID depicts a wide choice of departure fixes and also specifies altitudes and frequencies. All that is left is the transponder code. Consequently, you'll be hearing clearances like: "American 345, as filed via the Common Four to Keeler, Squawk 1763." Quick, isn't it? And you only need to write down one number.

VFR departures need a TCA clearance, which you must request from the clearance delivery controller. A tip here is to request an altitude low enough to put you below the floor of the TCA just as you depart the innermost ring. Frequently this innermost ring is under control of the tower, so the clearance delivery controller (who is in the tower) can grant this clearance immediately. If you desire or need a higher altitude that

takes you to the farther reaches of the TCA, this will have to be coordinated with the approach control facility, which takes a little more time.

Gate hold procedures are instituted during periods of departure delays. The idea is to keep the delayed aircraft at their gates with their engines off rather than to have them waiting out on the taxiways with their engines running.

What this means is that you will need a clearance to start your engine. Depending on the airport, this clearance may be obtained from clearance delivery, from a special gate hold frequency or from ground control.

The large airports differ somewhat in the ways in which transfers are handled from one controller to the next. For example, at some airports the clearance delivery controller, after furnishing the clearance, may say, "Call me when ready to taxi." After you do that, he may say, "Monitor (or switch to) ground on 121.75." This, as before, will mean you are expected to switch and listen until called. What's happening in this case, of course, is that each controller is passing a slip with your number on it to the next controller along the line; this eliminates the need for

each plane to announce its presence on each frequency. The other side of this coin, though, is that when an instruction is issued by the controller it *must* be acknowledged promptly. It's not sufficient just to begin moving your airplane as requested because (a) the controllers have had no assurance up to now that you are on the frequency, and (b) you may be a mile or more from the tower, and it's hard for them to see what you do.

Since the coming of the jet age, runups are a thing of the past, so the light piston-powered aircraft should have this completed, if possible, before reaching the takeoff threshold (or intersection). This isn't really too difficult to do. The taxiways are long and the taxi speeds of the jets are pretty fast, so a 10-second burst of runup power without brakes will often do little more than keep you up with the traffic.

What about wake turbulence? On a normal takeoff from the runway threshold, the light aircraft will be into the air well before coming to the point where the airliners rotate and begin generating their wingtip vortices. You might hit a few bumps when taking off across an intersecting runway being used by heavy jets, but the exposure is

minimized when flying across the wake rather than along it.

On takeoff you'll be assigned an initial heading to fly, and (unless advised otherwise) you're expected to initiate the required turn as soon as speed and altitude permit, even if this takes you across the center of the airport. The point is to clear the runway path as promptly as practicable so the next plane can be released.

So you're on your way. And if you felt like Cinderella before, you can be thankful that you don't have to worry about your fuselage turning into a pumpkin or your engine reverting to a group of mice.

On a more serious note, this article is not intended to encourage everyone to jump into his Skyhawk or Cherokee and buzz off to the nearest jetport for a lark. To the contrary—even setting aside the landing fees, which may be prohibitive—the use of such a large public resource as one of these big airports has to be approached seriously. But when the need is there, the system can accommodate large and small, private and commercial airplanes—in an equitable and efficient manner. Our obligation as we use the system is to use it properly and wisely. □