Finding Your Flute
Tips on Choosing, Renting, and Buying a New or Used Flute

By Mark Shepard
Illustrated by Anne Subercaseaux

Excerpted and updated from the book *How to Love Your Flute,* Shepard Publications, 1999

For more resources, visit Mark Shepard's Flute Page at www.markshep.com/flute

The more you know about flutes, and the more sensitive you are to them, the more likely you are to wind up with the right one for you. There are a number of ways of finding a flute to start playing. One of the most common, of course, is to buy one from a music store. One advantage of this is that you can compare and choose from a variety of flutes. Many music stores also sell reconditioned flutes or demonstrator models, which can be good bargains.

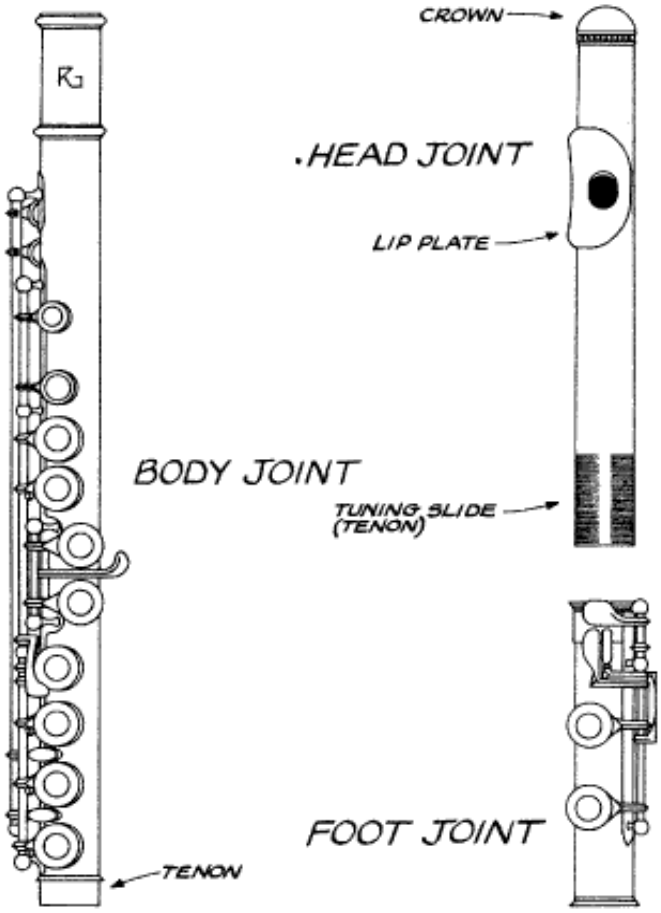
It is best to buy from a music store that has its own repair facilities and one that will guarantee the flute for a period of time. Most new flutes come with a guarantee from the maker, but this can mean you have to send the instrument back to the factory for a three-minute adjustment!

Many music stores have band instrument rental programs. Renting a flute at first can give you a chance to try out flute playing, and the particular flute, without making a heavy financial commitment. Most stores will apply at least part of the rental to an eventual purchase, usually at secondhand prices.

Used flutes can be found through newspaper ads, music school bulletin boards, pawn shops, flea markets, etc. Some incredible bargains can be discovered this way. When you inspect the flute, however, it is important to know exactly what you're doing or to bring along someone who does.

Or you may have a friend who owns a flute that's not being used and who is willing to loan it to you. There's no more economical way to start on the flute!

Parts Chart



Buying Name Brands

With flutes, buying by name is generally a good practice, since the reputations of the better-known companies have been built by the quality of their products. Though there may be little difference between these flutes and the lesser-known brands in terms of sound and acoustic design, over a long period you will often find a difference in the durability of the instrument. If you don't yourself know which brands are most respected, ask other flutists what names come to mind.

Metal Flutes—The Flute Hierarchy

There is a definite hierarchy of metal flute models, based mainly on the materials used and the care with which the flutes are made. As you go up the scale of metals, the quality of construction increases, and so does the price.

The least expensive flute, called a **student model,** is made from nickel-silver (also called **German silver**). Nickel-silver actually has no silver in it at all—it is an

alloy of copper, zinc, and nickel. If well made and properly cared for, a flute of this type can last a very long time.

Student flutes are covered, or **plated,** with a layer of either nickel or silver, to help resist corrosion. Silver plating lasts longer, gives a smoother, less metallic tone, is less slippery to hold, and can be reapplied when the original plating wears through. The only advantage to nickel plating is that it stays shiny with very little maintenance. Since the extra cost of silver plating is very small, it is preferable to the nickel.

Moving up the hierarchy of models, silver—with its slightly deeper, richer tone and slightly better "response"—replaces the other metals for more and more parts of the flute. The next step above a student flute is one in which the head joint is made of silver. Since the influence of the material on the flute occurs mainly at the head joint, this gives the flute basically the characteristics of a silver flute. The next level up is an all-silver body, and the one above that has a silver key mechanism as well.

Many times someone selling a flute secondhand assumes it is silver but actually has no idea what it is made of. Usually a flute says right on it if any portion of it is silver. Other ways to tell are: ask the original price; check the tenons, to see if silver plating has worn through; see whether it is nickel-plated—if the flute is nickel-plated, there is no silver in it.

Above the all-silver flutes in the hierarchy there is still one more large step—the handmade flutes. Most of these are made in silver, but gold and platinum are also available. Gold gives a "warmer," "richer" sound than silver, with somewhat less carrying power. Platinum, first used because it would theoretically make the best flute material, has a tone generally considered "cold."

Wooden Flutes

Modern flutes made from wood are still common in some parts of Europe (Britain, Germany and the Low Countries, and Eastern Europe). African blackwood (grenadilla) is the most common wood used; formerly, cocuswood was predominant, but it is no longer available in the finer grades. Pieces for the less expensive flutes are sawed from the log, while for the most expensive models they are cleaved. Cleaving exposes defects in the wood that can be rejected at this early stage, partially safeguarding against cracking in the finished flute. Cleaving also

guarantees that the grain will run end-to-end in the flute, which is preferable acoustically. Student models are sometimes made from ebonite, a hard-rubber compound resembling ebony, which is moisture-proof, but not heat-proof.

Because of the greater "resistance" of the wooden flute body, a wooden flute requires a tighter, more "muscular" blowing style. This generally produces a tone that is more rich, solid, and powerful than that normally produced on the metal flute. Disadvantages are that this type of blowing makes subtlety in playing more difficult to achieve and tires out the lips more quickly.

Various "compromises" between the wooden and the metal flute are available. Wooden flutes are made with thinned bodies and/or head joints to provide some of the tonal properties of wood with less resistance. Both wooden and metal flutes can be fitted with head joints of the other material. (As stated before, the material's influence on the flute's characteristics occurs mainly at the head joint.)

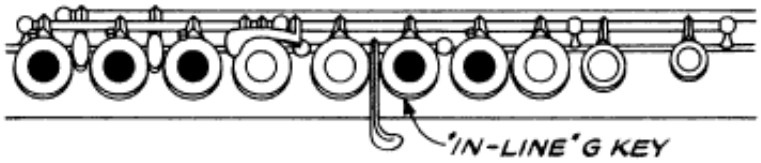
Flute Quality—General

Though quality of construction is generally related to brand name and to position in the flute "hierarchy," the sound and playing properties of a flute don't necessarily follow the hierarchical pattern. These properties are determined mainly at the mouth hole, and the dimensions of this part of the flute are so critical that no two flutes ever sound or play exactly alike. So, while it's a good idea to buy according to name and hierarchy, you should also choose on the basis of the individual flute.

I should state here that a beginner does not need a top-quality flute. The respect due a superior instrument demands that it be reserved for someone with a developed skill and a deep commitment. Generally, you are ready for a finer flute when you find it makes a difference in your playing.

Plateau Model, French Model

Two models of the modern flute are manufactured today: the **plateau model** and the **French model.** (In Germany, Italy, and Eastern Europe, the French model is not generally available; in France, it is practically the only one used.) The main difference between the two is that the French, or **open-hole,** model has holes in the centers of five of the keys.



There are several advantages to this: the holes are said to give a very slightly clearer, louder sound, because the air vibrations are less muffled; some of the third octave notes have slightly better tuning; and on some notes, extra effects can be achieved by half-holing—covering only half the hole of a depressed key, in order to bend the note sharp. These effects are especially useful in some styles of jazz or in imitating various kinds of foreign music.

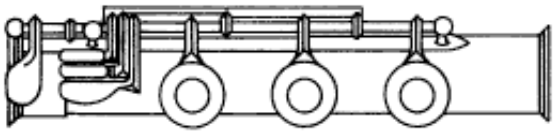
On the open-hole flute, when you press down one of the open keys, you must also close off the center hole with your finger so that no air can escape. This requires more strictness in the holding position, which you might consider either an advantage or a disadvantage.

Another difference between the two models is that the French model usually has a G key in line with the rest of the keys, while the G key on the plateau model is "offset" slightly. (Compare the illustration above with the Parts Chart at the beginning of this article). Though the in-line G has the advantage of "forcing" the left hand into a proper, vertical position, it is actually a somewhat clumsy arrangement; the offset G fits the hand much better.

The French model flute is slightly more expensive, both in initial purchase price and in maintenance costs.

Other Options and Variations

B foot joint. This style, available in most countries, has an extra key on the foot joint, enabling the flutist to play one note lower in the first octave.



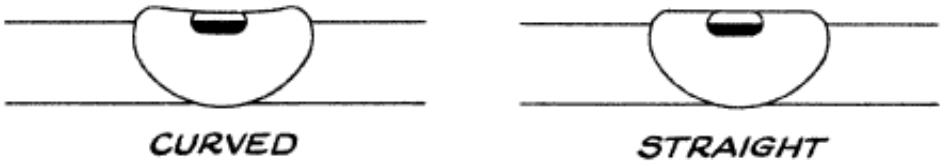
Thin-wall construction (metal flute). The thinner walls give a higher, thinner sound that is more responsive but somewhat harder to control.

Open G-sharp key. This key arrangement is commonly found in Eastern Europe. The lever played by the left little finger closes its hole when pressed, rather than opening the hole, as on most current-day flutes. This is the form of the mechanism that originally appeared on the modern flute, and a good case can be made for its superiority.

Features to Look For

There are several features you should look for on a flute, especially if you are buying a new instrument.

Curved lip plate (metal flute). This makes for easier blowing.

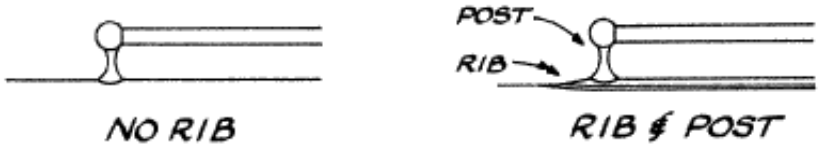


Mouth hole—average size. The two basic shapes used for the mouth hole are the oval and the rounded rectangle; either one is acceptable. The size of the mouth hole, however, should not vary too much from the average. A large mouth hole will favor the low notes at the expense of the high, while a small mouth hole will favor the high notes at the expense of the low.

Integral, rolled tone holes (metal flute). The walls of the holes should be raised directly from the body of the flute, instead of being soldered on, to reduce the chance of having air leaks. An exception is made in the case of some handmade flutes. These are normally fashioned with thinner metal tubing, so most makers do not raise the hole walls from the tube itself.

The tops of the holes should be curled, or "rolled," so that no sharp edge is presented to the pad—this increases pad life. (Some flutes have tone holes that are integral but not rolled.)

Rib-and-post construction (metal flute). In this style of construction, the posts that hold the key mechanism are not soldered directly to the body but instead to strips of metal (ribs) that are then soldered to the body. This greatly increases the reliability of the key mechanism.



Regulating screws. These allow the flutist to make basic adjustments to the flute mechanism, decreasing the need for professional attention. The flute should have four or five regulating screws; flutes with more than five screws have a tendency to go out of adjustment too easily. Handmade flutes do not normally have regulating screws.

Pitch standard. A series of conferences in the first half of this century raised the international standard pitch from A=435 vibrations per second, to A=440. This was accomplished in the United States and England in 1920 and in continental Europe in 1939—with the exception of France, which kept the previous standard. This means that flutes made in those areas before the dates given will be tuned slightly below today's standard pitch and are therefore less useful in group playing (unless modified by a competent repair shop). The same applies to French flutes played outside of France.

Revised scale. The completely new acoustic proportions that the flute required because of the pitch change discussed above were introduced into flute manufacture only in the 1970s—and by some companies, even later. (Flutes made during the transition period were more-or-less jury-rigged affairs.) The difference shows up in improved internal tuning, evenness of tone, and better responsiveness when playing at concert pitch.

Checking Out a Used Flute

If you are buying a secondhand flute, the list below will help you to determine its condition. Unless you are familiar with flutes, however, I strongly recommend that you bring along someone who is, to help you evaluate it. Or you could bring the instrument to a repair shop for a professional judgment.

Keep in mind that, although some flutes are truly beyond repair, most faulty conditions can be and are corrected during a standard overhaul in any repair shop. In fact, the best bargains can often be found among flutes that "don't work"—they sometimes require only a simple regulating adjustment, accomplished in a few moments.

Pads. These are the soft inserts in the keys that actually make contact with the holes. They should not be torn or yellowed and dried out.

Springs. These should be strong enough so that the keys return to resting position with a firm motion.

Action. The action should have a solid feeling. There should be free movement of all keys. No key "clicks" should be heard. Try wiggling the keys sideways—there should be very little movement.

Tenons. The joints should fit together snugly, but not tightly. There should be no side play when the instrument is assembled.

Head joint cork. Try pulling straight out on the crown (the piece at the very top). If it moves, the cork inside is too loose.

Mouth hole. This should have *no* nicks or scratches, especially on the edge you blow toward. This repair is *expensive*.

Dents (metal flute). Small dents on the body will have almost no effect, but dents on the head joint can cause tuning problems.

Finish (metal flute). The condition of the finish has no effect on the playing of the flute.

Cracked body (wood flute). This can be repaired.

Warped body (wood, ebonite). This can be repaired on an ebonite flute, not on a wooden one. A slight curving is to be expected on all older wooden flutes.

Other Sizes of Flutes

Modern flutes are actually made in several different sizes. The one with which we are most familiar—the **soprano** or **concert** flute—is considered musically the most versatile and satisfactory, and it is therefore by far the most commonly used. Other sizes, however, are useful for special purposes.

Flute Sizes
From top to bottom:
Bass, alto, soprano with B foot, soprano, E-flat, piccolo
Photo courtesy W. T. Armstrong Co.

The alto flute is wider and longer than the soprano and starts a half octave below it, on G. Its tone is very rich and mellow. Because of the larger volume of air, it requires more breath and is slower to respond. (This size of flute was previously referred to as **bass,** and in Europe it is still sometimes mistakenly called by this name.)

The bass flute starts one more half octave below the alto, on C. It is so long that the head joint has to be curved a full 180 degrees to allow the flutist to reach the mouth hole. Its tone is extremely deep, and even more breath is required than on the alto.

The F-flat flute is a slightly smaller version of the soprano. Its main use is for children whose hands are not yet large enough for a standard flute.

The piccolo is a small flute with a high, shrill tone. Most piccolos are made in the key of C, playing one octave higher than the concert flute; another type, the

D-flat piccolo—formerly popular but now becoming obsolete—plays one note higher. There are two major models of the piccolo: the metal cylindrical-bore model, which is easier to blow and has more stable intonation; and the wooden, conical-bore model, which is less shrill. Various combinations are also available.

Playing the piccolo requires a very tight holding of the lips, and a careful attention to intonation; you will find it difficult to switch between piccolo and flute unless you regularly devote time to each. When buying a student model, make sure it has been designed so that you can close all keys without hitting others.

The fingerings for all these flutes are basically the same as on the concert flute, but transposition is necessary when reading music.

Electronic Amplification

Flutes can be amplified by microphone or by pickup. There are advantages to each method. A microphone gives you a certain degree of flexibility by allowing you to move closer and farther away. You can go all the way from a low, breathy tone played close to the mike to shrieking high notes played from a distance, all without touching a control.

Pickups also have strong advantages. You don't have to worry about where you are in relation to a mike. Feedback problems are reduced or eliminated. Often the pickup is used with a preamp that can be kept near you, giving you full control over your own volume output. The pickup can be easily hooked through various electronic special effect devices. Probably most important of all, the reproduction quality of pickups is substantially better than that of microphones. In fact, this can even be a disadvantage—it's harder to hide your faults from a pickup.

The pickups in use today are electronic assemblies that fit within the head joint itself, replacing the cork. The various pickups available are based on differing principles, each pickup having its own peculiar characteristics. If possible, try out various types before buying.

For good reproduction, a *voice* amplification system or PA is required. Electric guitar amplifiers will not reproduce clearly.

Read the book!

How to Love Your Flute

A Guide to Flutes and Flute Playing

By Mark Shepard