THE ULTIMATE PIPING GUIDE

STARTING OFF

TIPS AND ADVICE FOR THE BEGINNING PIPER

by VINCENT JANOSKI

with contribution by Chris “Tone Czar” Hamilton
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*by Vincent Janoski*
The great bagpipe is a very old instrument. What is perhaps unique about it is that the Highland derivation has traversed the centuries relatively unchanged. You would think, given the numerous variables that affect a players experience on the thing, that pipers over the generations would have been quick to make modifications that made their playing experience less frustrating. Yet the bagpipe endures in the same form (more or less) as that played by MacCrimmon. Perhaps masichism is a necessary trait for a piper? Why else would one choose the great Highland bagpipe as their preferred instrument?

The Highland bagpipe’s long history and immutable form should thus bring with it standard methods of maintenance and manipulation that have endured over the generations, right? Try again. Ask twenty-five different pipers the same question about an aspect of bagpipe maintenance and mechanics and you will likely receive twenty-five different answers. The techniques for managing and maintaining the instrument have a long tradition with countless variations. It does not help that the bagpipe is a fickle instrument. Those able to achieve quality results with the bagpipe are regarded as sorcerers practicing some form of scottish witchcraft. The conven-
tional wisdom among non-pipers is that the instrument takes a long time to master or learn. Many current pipers might agree. It does take some time to master the Highland bagpipe, however, the obstacles to mastery are mostly physical, not musical. What could one accomplish if many of the physical struggles endemic to the bagpipe were removed? Think of the musical progress and artistry one could develop when one is thinking more of making music and less about holding, blowing, squeezing, fingering, etc.?

And that is the point behind this guide. The last twenty or so years have introduced new products and materials into the art of bagpiping removing many of the physical obstacles and variables that make piping most frustrating. With many variables removed by these new products, a fairly new player can now achieve (and maintain) a bagpipe experience that might formerly have taken years of learning and experience. One might think however, that the need for specialized knowledge is removed. Not so. Now, more than ever, pipers require knowledge in order to get the most out of these new products and achieve individual results suited to individual preferences. The key to achieving individual results is learning and applying the techniques found, for a start, in this guide, to place control of your bagpiping destiny with you—the player.

When we as players make specific adjustments to our instrument using specific techniques based on what suits our preferences, then those techniques
become a definitive set of skills and knowledge. They have proven results when we strike up and blow. That is the key idea. Knowing what works, what is most comfortable, what is most compatible, for you, the individual player. It is as crucial to the operation of this machine we call the highland bagpipe as is knowing how to breathe and blow. No other person or product or idea will give you the results you seek unless you first understand yourself as a player and understand and recognize the unique behavior of your instrument. Good results will come when these things meet—and when you confidently apply your own definitive techniques.

Use this guide as quick reference. Although it is written with the beginner in mind, pipers of all skill levels will hopefully find something of interest. It includes material and subject matter that is widely known but often overlooked or taken for granted. Future “Ultimate Piping Guides” will delve into more detail. Some material will be applicable to you, some not. Some topics will seem new, some not. The important thing is to take from it what is most compatible with your personal style. The willingness to explore and experiment, above all else, will develop the skills you need to create a customized instrument that increases your comfort, enhances your enjoyment, and gets you focusing more on making music as the most important aspect of playing the Highland bagpipe.

Happy piping!

by Vincent Janoski
STARTING OFF RIGHT

ELIMINATING THE MORE FRUSTRATING ASPECTS OF THE INSTRUMENT

Are you a beginner or ultra-newbie? If you are, you probably know a half-dozen tunes and maybe play about four of them on the full bagpipe. You may have a drone or two working, and you may be struggling to play for the length of an entire parade. At times, it probably feels like the bagpipe is fighting you or doing its best to prevent you from playing to your full abilities.

All these are normal experiences.

I can remember a time when I could barely blow the chanter reeds I was given, nevermind drone reeds. Images pop in my head from long ago of being given ratty, blackened, gnarled cane that was supposed to produce some sort of sound. (What did I know then, anyway?) Well, it produced sound alright, but not what you would want to hear from an efficient, well set-up set of Highland bagpipes.

And that’s what we’re talking about here. The ultimate goal, as you progress and learn, is to create an efficient bagpipe set-up that serves you well and maximizes your learning experience. Your bagpipe should be comfortable to play so that you can, well, play it! Ask any piper with any amount of experience and they will tell you stories of leaky bags, turning hemp, loose drones, broken reeds--the list
is endless. All pipers have experienced these things along the way of their playing progress. All of it interferes with your ability to play the instrument.

You will do yourself a world of good by putting everything possible in your favor. The bagpipe relies on a long list of elements that must all work together. Think of the bagpipe as a machine. A machine must have all its screws and bolts tightened, all parts properly lubricated, and all the parts in good working condition with no damage for the machine to work efficiently. The bagpipe is no different. Below is a list of simple areas to check and fix to ensure that your bagpipe is working properly. Follow it and monitor these items regularly, and the instrument will always be working for you, not against you.

**BAG**

Do not accept a leaky bag. Make sure your bag is completely airtight. Take apart your pipes so that you have just a “goose.” Cork up all the stocks except the blowstick. Fill the bag until you cannot blow into it anymore and let it sit for a few minutes. Now blow into it again. If you can blow even part of a full breath back into the bag, you’ve got a leak somewhere. It should remain filled and not deflate on its own when it sits. Check the seam of the bag. Check the joints where the stocks are tied or clamped in. You will have to fill the bag and squeeze it with your hands to get air flowing through the leaks. You can test all of these areas with some water and dishsoap. Place some soapy
water around each area and squeeze the bag. If there is a leak, even a small one, you will see bubbles. Find the spot and fix it. There are many ways to fix these kinds of leaks. The best ways is just to season the bag if it is hide, or reclamp or fix the holes if it is synthetic. Ask for help if you are unsure how to do this.

**HEMP**

The magic string. All the joints on your instrument should be freshly humped and snug. Pay close attention to the joints where the drones are in the stock. None of them should be loose. You are losing air through them if they are loose, most definitely. Ideally, it should take some effort to turn them and pull them out. Your tuning slides should be snug enough to stay put, but not too tight where you cannot turn them up and down the slide with one hand. Adjust the amount of *waxed* hemp in all of these areas to make it so. Take some off, add a strand, whatever it takes. You will need to do this periodically because hemp shrinks and swells with changes in the environment. If your hemp is dry or stringy, it means one of three things: you are not playing enough; it is old and needs to be replaced; or both. If your hemp is not moving when you turn your drone, cut it all off and re-do it. Wax your hemp with black cobbler’s wax at the beginning of one full wrap to make it stick. The rest of the wraps can be plain bee’s wax. You can also use the pre-waxed black or yellow hemp that has become popular with many pipers.
CHANTER REEDS

Do not accept a chanter reed that is too hard for you to play. Do not accept a chanter reed that is cracked, chipped, or otherwise damaged. You should be able to play the reed with the chanter out of the bag. If you cannot, it is too hard. The reed should be clean and white, with no black spots or bad discoloration. If someone has given you a pre-played reed, it will be a little discolored, and that is OK. Any reed that is pre-played should still be undamaged, however. It will be impossible for you to practice and play effectively if you have a reed that is too hard, or in poor condition. The reed will not perform well if it is damaged. You will just squeak and squawk your way through tunes with it. Be mindful to treat your chanter reed with care. They are delicate. Many a reed is chipped or broken simply by rough handling when putting it into your stock or pulling it out. If this happens, don’t worry, simply get another one.

DRONE REEDS

If you playing one or two or three drones, you are likely playing one of the many synthetic drone reeds out there. It is important that they be air efficient and balanced. See “Synthetic Drone Reeds” page 23 for a diagram and details on how to get them working efficiently.

Check the above areas regularly to ensure that you are getting the most from your playing time. You will learn faster, mainly because you will be playing more because your instrument is more comfortable.
to play. You will also notice that you will practice for longer periods of time before you get tired since your bagpipe is working like an efficient machine. As you progress, and your understanding of your own instrument grows, you can check out the next section, “The Comfortable Bagpipe,” for more advanced tips.
One of the greatest hurdles to mastering the Highland bagpipe is learning to “blow tone.” There is no question that the mastery of “blowing,” or lack thereof, will have a profound effect on a solo or band performance—both positive and negative. Understanding the mechanics of this aspect of the bagpipe is essential for reaching proficiency with the instrument.

What does it mean when we pipers talk about “blowing” or “blowing tone?” Blowing tone can be defined a number of ways. It can be producing a steady sound that does not waver. It can be producing a settled sound where a consistent amount of air is pushed through the instrument at all times. It can also be thought of as the basic combination of actual blowing into the bag and squeezing it. However, blowing tone is not so much a process than a condition that exists between player and instrument where bagpipe mechanics and the physical act of playing come together. Put another way, it is the point where playing the instrument becomes effortless. It is not just steady playing,
but all the elements that go into that steadiness as well. Reaching this point will depend on a variety of elements: Personal comfort, physical strength, stamina, and awareness of one’s own tolerance thresholds. These elements must be considered in addition to the physical process of blowing and squeezing the bag, reed strength, and pipe setup. Notice how actual musical skill is not in that list? That is because blowing tone is physical and mechanical. The physical involves how comfortable you are in holding and squeezing the bag. The mechanical is the pipe setup: reed strength; balance; and air efficiency.

**THE PHYSICAL**

It may seem obvious, but the physical aspects of holding the instrument, blowing, and squeezing the bag all separately have an affect on blowing tone. Personal comfort is essential to all of these elements. You must be aware of your own comfort thresholds and work within them. Here are some things to watch for and adapt to create greater comfort when playing:

**HOLDING THE INSTRUMENT**

You should be standing comfortably straight when playing the bagpipe—not hunched, not leaning forward. Your shoulders should be even and relaxed. Your body cannot maintain an unnatural position for long. That is why it is important to be standing and gripping the instrument as naturally as possible. Nothing should be forced. If you feel
strain in any part of your body as you play or after playing for a while, examine your position in a mirror to see where your body is creating the strain and endeavor to correct it. This is different for everyone, so specifics will not help too much. I know that once upon a time, my left arm and hand would get stiff after playing a while. I realized that I had a tendency to hunch my left shoulder when I played. When I realized this, I made an effort to keep my shoulders relaxed. I shifted the position of the bag under my arm by turning the left side of my body toward the chanter slightly, which forced my shoulder downward. I have no more problems with arm stiffness and my overall stamina increased instantly afterward. Pay close attention to your own position and comfort.

**BAG SIZE**

Part of the key to holding the instrument comfortably is having the right fit of pipe bag. Make sure you have a bag that is the right size for you. Most people of average height or below would do well with the smallest size bag that is commonly available. People of small stature might think about getting custom smaller-size bags made for them. It takes less time and effort to fill a smaller bag and they are easier to grip under the arm. Larger bags will only cause discomfort in gripping and squeezing. The same amount of air (and at the same pressure) is still traveling through the instrument despite bag size.
MOUTHPIECE
Make sure that the mouthpiece of your blowstick is the correct length for you. Your head should comfortably face forward and straight up when playing the instrument. The mouthpiece should sit just between your teeth and not too far into your mouth. If you have to turn or tilt your head, or crane your neck in any way to play, your mouthpiece is too long or too short. Cut it back or purchase one of the many adjustable-length blowsticks that are now available. The ball-jointed type is effective and allows for positioning the blowstick in just the right spot. For examples, watch some of the better solo pipers play. You do not see their heads twisted or turned, or their bodies in odd positions.

BLOWSTICK BORE
Pay attention to the inside bore of your blowstick. It should be as large as possible and if it is not, you should have it professionally bored larger. Most modern plastic blowsticks have larger bores. A larger bore will allow you to eliminate resistance when you blow. Your bag will be filled quicker and with less effort as a result.

BLOWING AND SQUEEZING
How often do you think you should be blowing into the bag compared to how often you should be squeezing it? Do you think it should be 50 percent of the time should be blowing and 50 percent squeezing? Should it be 40/60, 70/30? Many of the best pipers in the world will share this tidbit of information if you ask them: You should be blow-
ing at least 90 percent of the time and squeezing 10 percent. It is important for that bag to be filled completely at all times. Blowing most of the time is the only way to be sure that that bag is filled. Your squeezing should only be a way of maintaining the pressure in the bag while you take a breath. That being said, it is imperative that your pipes then be air efficient and comfortable to play to achieve this (we will discuss this below in “Mechanics”).

The bag should also be firmly against your body during blowing. The bag should not be loose nor slip from under your arm once filled. A small amount of slippage is normal—hence the blue dykem stuff many pipers have on their bag covers—but your arm should have a firm hold around the bag at all times. This is why a smaller bag helps.

It is important here to be aware of your own physical process. Be conscious of how hard you are blowing to fill the bag, when you need to stop, and how much pressure it takes to get a full sound from your pipe. Knowing these aspects will help you set up an instrument that suits your strength and tolerances.

**THE MECHANICS**

Once all of the physical aspects of playing the instrument are taken care of, it is time to give attention to reed setup and air efficiency of the instrument itself. There are only four reeds in the instrument, however, it is important that they be suited to each other and balanced to play with a
comfortable level of effort. Blowing tone is nearly impossible unless you have reeds that are within your own strength tolerances and that you have a pipe that is airtight and air efficient. The “strength” of the reed is defined simply by how much air it takes to make a full sound. It is important to be aware of this for chanter and drone reeds together. The idea is to have all of your reeds taking the least amount of air possible to produce a full, responsive sound. See the previous section “Starting Off Right” for the simple matters of making sure the bag is airtight, that joints are well hemped, and that all stocks are secure and airtight in the bag. These items are first on the list of basic aspects of bagpipe mechanics, but the next items on the list are the mechanics as they apply to the reeds.

CHANTER REED STRENGTH

Too many people choose chanter reeds that are too stiff and hard to play for them personally. It is not a “badge of honor” to play a gut-busting reed, nor does it mean you are a better player. Yes, it is likely that a nice, stiff reed will last a long time and have great resonance. However, if it is beyond your strength tolerances, you will never get that full resonance because you are unable to blow it fully. You will likely have to scrape it to make it easier thereby shortening its life and reducing its resonance—so what’s the point of having it?

You can have a reed that has a good response regardless of strength. Modern chanter reeds are built to get instant response with a minimal break-
in period. A reed with good response will take the least amount of air to get a full, crisp sound. Be aware of how hard you are blowing while testing the reed in the chanter out of the bag. A reed that is suited to your strength will be only slightly easier to blow once the chanter is back in the bag. It should not be harder to blow once you put the chanter back into the bag. If it is, then you must examine the air efficiency of your instrument (see below). If you can play the reed out of the bag, but your face is turning beet red (and you are about to lose control of bodily functions), then guess what, it will not get any easier with the chanter in the bag. Again, the amount of difference is different for everyone, so it is important that you are aware of your own blowing tolerances. You should be exerting some amount of effort (the reed should not be wimpy), however, comfort is key. Reject chanter reeds until you get the one you feel you can blow comfortably with a sustainable amount of effort.

It is a good bet that the reeds certain players feel are “perfect” are likely still too hard for them. A good measure for this: Find a reed that you believe is “perfect” for you and that you can blow comfortably (call this reed 1), then reject it and find a noticeably easier one (call this reed 2). This will give you a good indication of where your tolerances lay. If this new reed is just too easy to play (which can be just as uncomfortable), then you have found the working area of tolerance. Find the reed that sits within the strength of reed 1 and 2 and you have found your ideal reed. You may find that reed 2 is
perfect or still too uncomfortably hard. In this case, reed 2 becomes reed 1 and you then find an even easier reed that then becomes reed 2. It is really a matter of disregarding your own judgment. Any reed that you consider perfect, consider it too hard and find an easier one. You may want to experiment with this technique until you do, in fact, find the “sweetspot” where the strength of a chanter reed is perfect for you.

**AIR EFFICIENCY**

Whether you are playing synthetic or cane drone reeds, the same rule applies: they should take the least amount of air possible and still play. It is important for all three reeds to be taking the same amount of air to play so, this is the first aspect that should be tackled when setting up an air-efficient bagpipe. (See “Synthetic Drone Reeds” for a more detailed discussion.) Once you have your drone reeds taking the same amount of air, it is then time to gauge the amount of air with respect to your chanter reed. This is what “balance” is all about. It is the term used to define the state where all of your reeds are taking a relatively equal amount of air to play fully. Follow these simple steps:

1. Take out your drones and blow the reeds individually out of the stocks.
2. Keep blowing until you are blowing hard enough to shut them off. (If you are blowing as hard as you can, and the reed is still playing, or just shuts off, then it is taking much too much air.)
3. Move the bridles down on all three reeds and gradually increase blowing until you are just starting
to exert a stiff blowing effort when they shut off. (Make sure the amount of blowing is equal for all three reeds.)

You now have your drone reeds at “point zero.” Now play your chanter reed out of the bag. Notice the amount of blowing effort you are exerting. Now blow your drone reeds out of the stock and gradually increase blowing until they shut off. Compare. How hard were you blowing to shut off the drones? Was it more than the amount of blowing to play your chanter reed? Was it much less? Adjust the bridles on your drone reeds. Keep performing this comparison until the reeds are shutting off at, or just past, the point of blowing effort when playing your chanter reed out of the bag. This is the point of balance and air efficiency. Your drones are now taking the same amount of air as the chanter. Play the pipe. You may find that further adjustment to the bridles is necessary after playing a while. Your drones, or a single drone, may shut off. Simply make small moves on your drone bridles to get the reed(s) playing again.

THE RESULT

You should notice an immediate difference in the amount of effort it takes to play the instrument after applying the above techniques. The pipe should be comfortable to play with little thought paid to strenuous blowing or squeezing. Your practice times will increase as you find it easier to play for longer and longer periods without fatigue. Your music will get better because you are able to think more about
fingerling tunes and less about standing, blowing, or squeezing. You will also achieve greater control over your own playing and the instrument in general. Most important, you will achieve an understanding of your personal preferences and physical comfort level.

Take the time to employ some or all of the points mentioned above. All of them will contribute to greater and faster improvement.
SYNDHETIC
DRONE REEDS

SET-UP TIPS FOR OPTIMAL PERFORMANCE OF SYNTHETIC DRONE REEDS

Some may think that the various makes of synthetic drone reeds such as the Wygent Synth-Drones, Ezeedrones, Henderson Harmonics, Omegas, Achtibuje, Selbie, etc. eliminate some of the problems and difficulty of traditional cane reeds. In some respects, they would be correct, however, setting these reeds up to achieve peak sound still requires the same knowledge and skills pipers have always used to set up cane.

Many of the commonly played synthetic reeds today elaborate on a basic design. It follows then that the process to get them sounding their best would be relatively the same for all of them. **Figure 1** shows the basic synthetic reed design most often seen with all of its parts identified and some of the more common actions and results explained.

The key thing to remember is that you will need to spend some time *before* you actually play them to get them operating efficiently. Below are some key features to watch for in a step-by-step process to help you achieve optimum performance from these reeds and start you off right. If you are already playing any of the various forms of these types of reeds, take moment to back-track and go through these steps anyway. You might be surprised.
STEP 1: CONSTRUCTION
Look over your new set of reeds prior to playing. Read the instructions that come with the reeds. Are they well made? Are there any defects? Make sure your tenors are nearly identical in appearance. Be sure also that any glued or tied parts are secure.

STEP 2: BLOW-IN
Apply the techniques described in the instructions accompanying the reeds if needed. Take your drones out of their stocks and play the reeds by mouth. Compare the response of each. Are the responses similar? They should be, and will require adjustments if not. The initial “bwaaa-ummmm” blow-in sound should be present for all three reeds. Compare air intake. Do the reeds (tenors especially) respond the same way with the same mouth pressure? Slowly increase your blowing pressure until the reed shuts off. It should cut off just before you are blowing your hardest. If your reed response and/or air intake differs between reeds, then they are not acting efficiently. Adjust the bridles slightly on the reeds to get them all responding to the same air pressure.

STEP 3: TONAL QUALITY
Compare the sounds of each reed by mouth—particularly the tenors. The tonal quality or pitch should be nearly identical. The drones should be at the optimal point on the tuning slide (at the hemp line or around it; wherever your pipes perform best). If you are not getting identical responses after fol-
FIGURE 1. COMMON SYNTHETIC DRONE REED DESIGN

Seating pin
Wrapped with hemp and seated into drone. Gives extra length for greater range of seating adjustments.
Seat reed deeper to sharpen reed pitch; seat read further out to flatten pitch.

Bridle
Rubber O-ring. Slides up and down the tongue and reed body.
Slide bridle in small amounts. Sliding bridle down the reed shortens the tongue, sharpens the pitch, and allows the reed to play with less air; sliding the bridle up the reed lengthens the tongue, flattens the pitch, and causes the reed to play with more air and blowing.

Tongue
Made of fiberglass, plastic, or thicker carbon composite. Heat set and curved for proper vibrating action.
No flicking! Tongue should vibrate optimally without manipulation.

Tongue seat
Tongue is secured to reed body with a band or O-ring. Secures the vibrating tongue to the reed body and keeps it stable.

Reed body
Hollow “tube.” Fashioned of plastic, fiberglass, or composite. Set with small hole beneath tongue for release of sound.
Inner walls can sometimes collect dirt over time. Blow or rinse out occasionally.

Tuning, or “pitch” screw
Hex-head Allen or standard screw, plug, or sliding pin.
Changes the length of the inside chamber of the reed and thus overall pitch. Turn screw clockwise (in) to sharpen reed and tune drone higher up on tuning pin; turn screw counter-clockwise (out) to flatten reed and tune drone lower on pin.

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lowing step 2, it is likely that the tone of each of these reeds will differ as well. After you adjust the bridles and get the reeds responding to your liking, start adjusting the tuning screw or slide to get them all to match the pitch you want. Use one reed as a guide and get the others sounding like that one. Turning the screw out counter-clockwise will flatten the pitch, causing the drone to tune lower on the hemp. Turning the screw in clockwise, will sharpen the reed and cause it to tune higher. Blow each reed back and forth and listen to the sound produced. Keep adjusting until there is no difference in the sound between them.

**STEP 4: STRENGTH**

Once you have made the above adjustments, put the drones in their stocks and cork up your chanter stock. Blow up the reeds and tune. Now, increase your squeeze on the bag and blow as hard as you can. You are trying to shut them off. As you do this, all three reeds should shut off at about the same time just before you are blowing your hardest. If you can’t shut them off, or if only one or two shut off, then the offending reed(s) are too strong and will require some further adjustments. Take out the reeds and pull down the bridles (toward the screw) on the offending reed(s) slightly. Check each by mouth to make sure they still match in pitch and adjust if necessary. Try the shut off technique again. Keep doing this until they all shut off simultaneously. If they shut off too soon, they will shut off with your chanter and need further adjust-
ments. Pull up the bridles slightly to open the reeds until you reach the desired shut off point.

**STEP 5: PLAY**

Now put in your chanter and play. How do your new drones tune in relation to the chanter? Too high? Too low? Regardless of your chanter pitch, your drones should tune the same relative to the tone of your chanter if you followed the above steps. Once your chanter is tuned, you can judge whether you need to further adjust the pitch on your drone reeds to get then tuning on the hemp. With each adjustment however, be sure you check by mouth that your reeds match in pitch. Keep in mind that all of the above adjustments are small moves on the parts of these reeds. It does not take much of move on the bridle or the screws to get a change. Once you have established a good starting point, the adjustments to fine tune these reeds become even smaller. After that, they will sound good and be comfortable to play.
THE STRIKE-IN: YES, YOU CAN!

NO MORE BLOWN ATTACKS—LEARN THE SKILLS FOR THE PERFECT, PROFESSIONAL START

by Chris “Tone Czar” Hamilton

One of the biggest piping peeves I encounter in my judging and teaching rounds is the unprofessional, or unrefined strike-in. It is all too prevalent in band competition, where it can have an adverse impact on a band in two ways: (1) on the “attack” or “intro” portion of the score—which is self-evident; and (2) on overall morale—which can be equally devastating. That is, the player or band may not recover mentally from the poor start, and the entire performance suffers. In a solo contest the strike-in is not a judged part of the performance. However, it certainly contributes to your overall deportment and professionalism in a positive or negative way.

In the non-competition performance arena, a good strike-in is equally important. Even the non-piping, non-musical public can figure this one out. An uncontrolled cacophony of seemingly random sounds (whistling tenor drone, early chanter, honking bass drone, single-toning tenor, inappropriate intro notes) when starting an instrument is easily detectable by the listening public, and certainly other musicians must sigh or sneer when they see...
this. Visually, it’s just as bad. A competent performance on the bagpipe should begin with a professional, controlled strike-in. It’s the first thing that tells the listener that you know what you’re doing.

I feel qualified to speak on this issue. I have developed an excellent, gracefully rapid technique for getting my bagpipe struck in, fully blown, and ready to play. I can really “nail” a start. But, I have been the architect of a few clinkers in my time, including one particularly traumatic one at the Worlds where I managed to sound nearly every note on the chanter on the intro except the “E”. Yes, I know how Bill Buckner and Bob Stanley felt, but the Sox exorcised their demons, and I exorcised mine.

Good strike-in technique is a learned skill, developed by good preparation and thoughtful repetition. As a young piper I was once told that I looked as if I were trying to throw my pipes over my shoulder (something akin to a sheaf toss) on every start. From that inauspicious beginning, I analyzed, experimented, and practiced until I could strike in any pipe, with any bag—my own, a bandmate’s, anyone’s—time and again, first try or hundredth. Good strike-in technique is not fostered by plugs, valves, regulators, and whatnot. It is simply what it is—technique. The many popular after-market products have their uses, but they are band-aids. The key to the strike-in is in the technique of the piper, and any piper can learn to do it properly. (For the record, I use none of the modern devices on either of my bagpipes.)
STEP 1: INSTRUMENT ANALYSIS

The first step is to take stock of your instrument and eliminate it as a negative factor in your strike-ins. Having a proper reed set-up and a comfortable fit is the starting point to good strike-ins. A checklist of points to examine follows on the next page. Work your way through this list and make sure you have all of these aspects accounted for in some way. If any of these checkpoints get a failing grade on your pipe, fix them! The details of that are beyond the scope of this article but there is a wealth of information out there to help you. If you are unsure about the reeds or the ergonomics, comparing your instrument with others is a good method. Try someone else’s instrument and compare it to yours. Gauge the strength of the reeds compared to yours, take note of the playing comfort and fit. Have another piper try your instrument and give a critique.

STEP 2: TECHNIQUE ANALYSIS

Once you have analyzed your instrument and comfort and determined that your bagpipe itself is not an issue, the issue becomes your technique. The proper strike-in is a learned skill that only experimentation and practice can ensure. Granted, some drone reeds can be “blown on” by breath power only, but getting them to do that without a howl can be problematic.

The five major steps to perform for a smooth strike-in are:
1. Fill
2. Strike
3. Blow
4. Maintain
5. E

I will use the terms left and right hand or arm for simplicity. Right-shoulder players should make the necessary mental adjustments to the text.

Practice the five steps and analyze your movements. Experiment with different motions and find the best process that will take you through the steps toward good strike-in technique.

**1. Fill**

Position the bag vertically—hanging toward the ground—with the drones across your shoulder more towards the horizontal. I find this allows the most control over the bag in starting (and re-starting if necessary). Keep in mind that it is the hands and wrists that are used for striking in, not the forearm and elbow.

Fill the bag as much as possible, until just about when the tenor drones give a little toot. If you have plugs, valves, or enhancers, this is an easy step as these devices will change the response of the drone reeds so that early toots are nearly impossible. On the down side, they impart a balloon-like feel to the bag that I find very unnatural and unpleasant.

It is imperative that you get as much air as possible into the bag in this preliminary step. A sub-
optimally full bag will be much less likely to cooperate. The greatest possible volume of air gives you more air pressure and volume to work with to power the drones on strike-in.

With your bag hanging perpendicular to the ground, place your right palm and the left wrist so that they are just touching the bag (see Figures 1, 2, and 3). Some prefer to use their fingers instead of the palm, but I feel that the palm gives the cleanest start. You may download and view a short video of this process at www.toneczar.com/index.asp?PageAction=Custom&ID=51.

2. STRIKE
To begin the strike-in, move your right hand about two to three inches (at most) off the bag, then strike or “spank” the bag firmly with your open palm on the one side and your wrist/forearm on the other, using your bag-side forearm as a “moving anvil” to the palm’s hammer. The exact spot where your palm strikes the bag can vary. I like to hit the lower right side of the bag, near the seam and below the bass drone. You’ll need to experiment to find the “sweet spot” on your bagpipe where the reeds respond properly. The moving anvil concept is very important. If you let the left arm move to the left with the spanking motion, you may get a howling bass drone or squealing tenor drones. You need to bring the left arm in towards the bag—both sides of the bag should be struck simultaneously—so that the reeds are “jump started.”

It is important to note that on this initial strike,
Figure 1. The “fill” position: Drones positioned over your shoulder more toward the horizontal.

Figure 2. The “fill” position: Palm touching the bag, which is perpendicular to the ground.

Figure 3. The “fill” position: Hand and wrist just touching the bag and ready for the “strike.”
you should not try to strike-in with your hand already on the bag. In other words, don’t rest your hand on the bag and simply push. Don’t skip the Strike step and try to “blow” the drones on. Either method will result in howling drones.

3. BLOW

Immediately following the initial spank (not concurrently and certainly not before), blow to maintain the pressure level and counter the decrease in air just created by that strike. This pressure is the Clean Power-On Pressure (CPOP) of the reeds, but it is not yet Full Operating Pressure (FOP). If you go into FOP now, you’ll get an early chanter and possibly a honking bass. You must develop a feel for exactly what that pressure is on your own instrument so that you can replicate the strike-in cleanly every time.

If you reverse the order of the Strike and Blow steps, you will struggle terribly with howling drones. I hear this all time when judging bands—several howling tenors throughout the pipe corps during the attack.

It is critical at this point to listen for a telltale howl from the bass. Learn to recognize it. If you hear it, you must stop, back up to the Strike step, and retry—perhaps varying the location of the spank or the exact instant of the initial blow. Do not proceed any further until this is corrected.

If you have performed the Fill, Strike, and Blow steps successfully, you will have a bag that is nearly
full, but not completely full. Enough pressure and air volume is in the bag to keep the drones operating at the CPOP, but it is not yet enough to sound the chanter. The next step is to keep this pressure going as you push the bag under your arm.

4. MAINTAIN

The combination of the Strike and Blow steps should get the drone reeds up to CPOP, where they are in their first tone or nearly into the double-tone. Some brands of reeds may double-tone at this point. The exact point of double-tone is not important, as long as they pop into the second tone before the chanter comes in on E. If they need the full pressure of the chanter to double-tone them, then the tongues are too open—move the bridle down to ease them up.

The next step is to maintain this pressure as you push the bag up under your arm via a combination of blowing and arm pressure. Do not let the pressure drop, or the howls will begin. Do not increase the pressure, or the chanter may sound early. Blow just enough to keep the drones sounding at their double-tone. Get the bag all the way up under the arm. You need to become intimately familiar with your instrument and setup so that you can push the pressure just to the edge of the chanter sounding, but not actually sound it. Obviously, a very weak chanter reed is a liability here. So is a very stiff chanter reed for that matter, because you will need extreme pressure—hard arm pressure rather than just blowing—to sound it.
It is also very important to keep a relaxed but firm grip on the chanter with the left hand as you push the bag up. Tension is your enemy. A relaxed approach leads to smooth confidence. Tension and haste make honks and squeaks much more likely.

5. E

Once you have the bag solidly under your arm and both hands firmly in place on the chanter, sound a note (preferably E for solos, definitely E for bands). Blow the note into FOP, don’t hammer the bag with your arm to bring the chanter in. If you hammer the bag, the E will not be true, and drones are likely to stop. If you’ve performed the Maintain step properly, very little additional blowing pressure will be required to pop the chanter into full true pitch. Don’t gradually blow the E into pitch—it must be an almost “instant on” to sound true.

I like to close off the top hand of my chanter as I’m bringing the bottom hand onto the chanter. That way there is no possibility of misplacing the bottom hand (such as closing the E hole with the D finger) leading to an “A” intro and a sudden panicked “strumming” of the bottom hand as you try to reposition things. Been there, done that, it’s ugly. However, as soon as you feel the bottom hand firmly in place, open the E finger solidly, and then sound E. Don’t sound the E as you open the finger, you’ll get a distorted “bending” E. Another approach here is to keep the top hand in the E position throughout the process. I don’t prefer that method because of the possibility of moving the
bottom hand one hole too high. Another tactic is to keep the top hand thumb off the hole during this process, so that if the chanter should accidentally sound, the note will be a quieter less-noticeable High A rather than the louder E. Whichever method you use, it is paramount to keep the top hand in a gentle but firm grip—tension is your enemy—a tense hand means you will have a tense forearm, and a tense forearm may apply too much pressure to the bag and result in an early chanter sound.

Do not play a G gracenote on the introductory E. Doing so makes a different note than E, it’s a G-to-E and it does not mesh with the pure E from the rest of the corps. You’d be surprised at how many people do this completely unaware. Watch your bandmates and don’t let yourself, or them, off the hook.

**STEP 3: PRACTICING**

Pushing the bag up, bringing the bottom hand in, positioning the hands, and blowing a full-pressure E must take place in the proper sequence and in a very short amount of time. The best way to increase your competency in this area is to practice it slowly and deliberately on your own. Do not start out with a time limit (i.e., two three-pace rolls) rather, do it at a comfortable relaxed pace and perform every step correctly. If you make errors, start again. Devote ten minutes or so of your practice sessions on this. Only when you become proficient at it can you take it the next level and make it all happen within the proscribed time limit.
Pipe Majors, it’s worthwhile to do attack drills at band rehearsals. Start with the two three-pace rolls, the strike-in, and the first eight bars of an intro tune. Repeat, repeat, and repeat. Stop and watch individuals to seek out poor technique. It’s even more worthwhile to refuse to allow pipers to ever improperly strike in the instrument, even when tuning or “blowing up” in order to hear the chanter. If every time instruments are started they are expected to be started cleanly, and a poor start (even in a chanter tuning session) becomes a redo until it’s correct, you’ll find the standard will improve quickly.

**10th INNING, GAME SIX, MOOKIE SWINGS...**

Practice makes perfect, but accidents do happen, and inevitably a band will have some blown attacks on the field. Though preparation is important, equally important is disaster recovery. What the player does after a honking drone in an attack can make or break the performance. There are several options:

**RE-STRIKE** I prefer this. Unless you’re in the front rank, you may be able to get the pipes up on the second try with no one the wiser. Even if you’re spotted, it can still be done gracefully with little impact on the overall sound or score. Keeping calm and panic-free is the key. Don’t try to rush it. You must let the reeds settle before re-striking in order to do it cleanly, otherwise you’ll get stuck in a cycle where they can’t be started cleanly because there
is too much pre-strike air volume and pressure in the bag and the reeds are still howling from the previous attempt when you re-strike. Relax.

**REACH-UP AND STOP THE DRONE** This would be a last resort, after you’ve tried re-striking several times. Better to be spotted popping off the bass than listen to it honk for several minutes.

**OVER-PRESSURE THE BAG TO STOP THE DRONES** Too risky. It might work, it might not. Either way your pipe will sound terrible during the adjustment, you’ll leave a “drone gap” in the circle when the drones all stop, and your chanter reed may not recover from the pressure spike.

**LET IT HONK AND HOPE NO ONE NOTICES (A.K.A. PARALYSIS)** Umm, no. Everyone will notice, and your band will almost surely finish at the bottom. Nothing destroys a band’s tone like a bass drone that honks in another octave throughout the performance. Judges wish we had the power to walk into the circle and pop them off, to spare our sanity.

**FLEE THE FIELD IN PANIC** Yes, this has actually happened. Though it will probably earn the band a disqualification, it makes for great beer-tent stories.

A blown attack is not good, but my advice is first, don’t make a big deal about it on the field. There is not a one of us who has played for any significant amount of time in bands that hasn’t blown one. Second, a bad attack can be costly, but I postulate that the impact of the bad attack is often felt more as diminished morale and panic in a band’s ensu-
ing performance than by any penalty assessed by thoughtful judges. I can’t see why someone would let six minutes of good playing be negated by a blip in the first three seconds. A good attack is a great attention-getter and stage setter for the band’s intro, but it is still an intro, and not the whole performance. It’s like giving up a grand slam home run in the first inning—you’ve dug yourself a hole, but the game isn’t over. Keep playing.
INSTRUMENT ANALYSIS

Take stock and address each of the items on these lists to make your bagpipe a positive factor in your strike-ins.

CHECKLIST I: TENOR DRONES

❑ SEAT THE REEDS FIRMLY IN THE REED SEATS OF YOUR DRONES. It’s a good idea to have a “safety line”—an extra strand of hemp that prevents the reed from ever falling into the bag should it come loose from the reed seat.

❑ ADJUST THE BRIDLES SO THAT THE REEDS FUNCTION OPTIMALLY. The adjustment should be done with any other adjustments needed to some of the modern drone reeds. In other words, your bridle adjustment should be done after you have made the proper adjustments to tuning screws and whatnot to your particular make of reed. Opinions vary, but for me the optimal bridle setting is where the reed takes a conservative amount of air but will not shut off with reasonable overpressure. The modern makes of artificial reeds make it extremely easy to make fine adjustments in this regard. Some pipers set their reeds to stop with the slightest overpressure. These pipers can suffer drone stoppages at inopportune times.

❑ ADJUST YOUR BRIDLES TO GET A GOOD INITIAL SOUND.
The reeds should not “whistle” when first blown at normal operating pressure. When blown, the reed should “double-tone.” That means, the reed should start with a higher-pitched initial tone, then drop into the lower-pitched standard tone when the blowing pressure nears normal operating strength. The
term “double-tone” is often used in a pejorative manner, but the correct use is to describe the two-pitch effect of a well set up drone reed. Sometimes there is a slight transitional “flutter” effect. Those of us raised on cane reeds will recognize this as a feature, not a bug.

❑ **THE DRONES SHOULD TUNE AT THE IDEAL SPOT ON THE HEMP.** All your reed adjustments—the tuning screws, bridle, and depth of seating—should be such that the drone tunes with the top section in the proper spot on the drone. This can vary on different brands of pipe, but a good rule of thumb is for some hemp to be showing.

**CHECKLIST II: BASS DRONE**

❑ **SEAT THE BASS DRONE FIRMLY IN THE REED SEAT OF THE DRONE.**

❑ **SET THE BRIDLE SO THAT THE REED FUNCTIONS OPTIMALLY.**

❑ **ADJUST YOUR BRIDLE TO GET THE PROPER INITIAL SOUND.** The bridle should be set so the drone does not “honk” when first blown. This is often called a “double-tone,” but it’s not—it’s a howl, analogous to a whistling tenor drone.

❑ **THE DRONE SHOULD TUNE AT THE IDEAL SPOT ON THE HEMP.** This is the same as the tenors, in concept, however, the optimal tuning spot for the bass can vary enormously from instrument to instrument. A good rule of thumb is to have the bass top section tuning on or near the hemp, and the middle section two to three finger widths (1 to 2 inches or 25 to 50 mm) from the mount. Some bass mid-sections
tune high by default, but several pipe-makers have told me that this is not a desirable feature, and that the higher the middle section, the more likely the occurrence of strike-in problems. The bass drone does not double-tone like a tenor. It should go right into its full tone immediately. Inverted-tongue bass drone reeds have a reputation for being easier to strike in than standard bass reeds. Some brands of synthetic reeds are also inherently easier or harder to reliably start too.

CHECKLIST III: ERGONOMICS

❑ **GAUGE YOUR COMFORT LEVEL.** Is the bagpipe generally comfortable to play? Is the bag size, blowpipe length, drone spacing, and so forth set up for a comfortable stance? A bag that is too-large or too-small can be very hard to strike in, and the other factors can make it generally uncomfortable to play, and hence, to start.

❑ **CHECK YOUR BAG.** Check to make sure your bag is completely airtight. Make sure that there are no leakages. Bag type can certainly also make a difference in strike-in technique and you may have to find the best way to strike-in your particular type. The weightier more solid bags (sheepskin especially, or hide) are far and away the best and easiest to start. The hybrid synthetic bags (bags with a thin hide or suede outer layer) are not bad, but there is still a bit of an artificial feel to them. The flimsier synthetic bags can be problematic, but are by no means impossible to work with. Make sure the type you choose suits you.
VALVES, PLUGS, REGULATORS, OR “ENHANCERS.” I recommend setting these aside for the purpose of learning proper strik-in technique. They can always be installed again later. Besides the balloon-like qualities they impart to the bag, I don’t care for the dampening effect on the quantity and quality of drone sound.

CONCLUSION
A pleasing strike-in is a joy in itself. Most important, it’s a learned skill and can be mastered by anyone willing to thoughtfully master it.

Pipers who strike in their bagpipe in a howling uncoordinated mess of random notes and squeals will always project an unpolished and unprofessional image to the general public, let alone to judges or the rest of the piping community. Even someone who knows nothing about piping can figure out that it’s not supposed to sound that way. When professional musicians on other instruments commence to play, it’s normally an orderly and controlled display. Why should we as pipers tolerate anything less?
ABOUT THE AUTHORS

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