

2007 Tuition Series

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Setting up the Pipe Corps

Introduction

We have covered a fair bit of the specifics of reed manipulation, maintenance, tune selection and the like in previous tutorials. The main area requiring attention now is how to put all of these individual parts together to achieve a first rate Pipe Corps sound. There are many different opinions on how to do this and, as always, what I am detailing here is just my view on things. If what you do produces the desired result, then you are not wrong. However, there will always be others that do some things better than us, and we should all be prepared to learn and strive for a higher standard, a more efficient and effective way of doing things; in short, we should never stop learning.

This tutorial will cover a methodology for achieving a good pipe corps sound. It is not a fail safe formula! Whilst the methodology might be logical, it will rely on individuals being able to play their part in the process, and for the Pipe Major to understand what he/she is trying to achieve.

The Pre-requisites

There are a number of elements that we need to get right before we go about putting the pipe corps sound together;

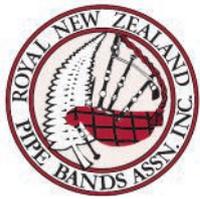
1. **Chanters.** First and foremost, we need to have decent hardware (chanters). If you are playing in a band that has not invested in new chanters for 20+ years, then it is highly likely that the chanters will not be up to the mark when it comes to achieving the desired pitch, volume and intonation. They may also have had some significant carving of the holes making them that much harder to finger. There are plenty of makes of chanter on the market that are very good and relatively affordable. In the long term development plan for the band, there should be an element that covers replacing pipe chanters every 10 years or so. We need to plan with an eye to the future as well as for the here and now.
2. **Chanter Reeds.** Again, we are blessed these days with a far greater number of reed makers than yesteryear and the quality of the reeds available is also far superior than in previous times. The days of ordering 4 dozen reeds only to find that 12-18 of them will be anywhere near good enough to use are

long gone. Notwithstanding this, we still need to remember that some manipulation of the reeds we get will be required – we have not yet got to the stage where you can buy a dozen reeds off the shelf that will instantly suit each member of your pipe corps! We need to ensure we have a ready supply of good quality pipe chanter reeds, enough so that we are never caught short – there is usually a minimum of a 2-4 week waiting time to get reeds from anywhere, especially at times of the year when they are in high demand.

3. **Drone Reeds.** There is more flexibility with drone reeds as different makes of pipes will suit varying makes of drone reeds. The minimum standard we should be looking for is:
 - a. Steadiness,
 - b. Reliability,
 - c. Quality of sound, and
 - d. Volume.

All of these elements have a part to play, and no one solution which works for one band will necessarily work for another given the different range of makes of instruments. We need to have a steady and reliable drone sound. It is no good to have a very high quality sound that may or tends to go out of tune too readily and that is not reliable with starts and stops. Ideally, we will have all four elements present in our drone sound – that is what we should be striving for. Too often, NZ bands settle for a steady and reliable drone sound and ignore the other two factors. It is not good enough at any grade level, particularly in these days of synthetic bags and synthetic reeds. Again, some financial investment is required to get the right reeds for your band, and again, this should be planned for. It is not necessarily an expensive exercise when you consider the life that you will get out of the reeds (at least 2 years).

We will deal in more depth with the drone sound later in this tutorial.



4. **Bags.** The whole pipe corps should be equipped with the same bag and moisture control system. To do anything different is folly. The pipe major or person setting up the pipe corps must know what the pipes are going to do in different weather conditions with the set up the band has – anyone with a different bag/moisture control set up is likely to have their pipes react differently or at least at a different rate to changes in the weather. This makes the job of getting and maintaining a good pipe corps sound that much more difficult.
5. **General Maintenance.** The pipes within the corps should all be maintained to a high standard – hemping should be first rate to ensure the drones tune easily with one hand but are not loose, and are air tight, drones are not too far apart or too close together, bag covers are not too large or small for the bag, moisture control systems are operating correctly, tape on the chanter is in good shape and not prone to slipping, and the list could go on. See Tutorial 9 for a more complete diatribe! Maintenance is vital. It will make the pipe major's job of setting up the pipe corps so much easier – it may even approach being a pleasurable task! Maintenance is the responsibility of each individual piper – to have a poorly maintained bagpipe and expect to play in the band is akin to a surgeon with blunt and unsterilised surgical instruments expecting to be allowed to operate. It just isn't done!

Chanter Tuning Techniques

We should be selecting reeds specifically to suit each piper in the band, and we should also have a back-up reed for each piper in the band. This will entail the pipe major getting to know the capability of each individual piper in the band very well in order to select and manipulate a reed to suit.

Pipers: you need to be fully cognisant of the fact that you will be blowing a reed that is a little firmer than you would ideally like to play. There is no room for negotiation on this. Full stop.

I am not advocating playing a gut busting, hernia inducing strength of reed – far from it. If you have a reed that is a little harder than you ideally like to play, you are far less likely to commit any of the following crimes – and they are crimes!:

- a. Early E in the attack,
- b. Over blown E in the attack, or
- c. Over blowing your chanter during a performance due to nerves.

A high standard of maintenance on the pipe will ensure that the air use is very efficient, and you will not be losing air unnecessarily.

Pipe Majors need to be well-versed in reed manipulation to ensure they get the best out of each reed and that the reeds can be tailored to suit each person.

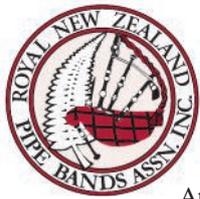
The Master Pipe

It should be common practice for each band to have what is termed a 'master pipe'. This is the bagpipe that the rest of the instruments are tuned to. Some bands with a larger pipe corps (greater than 16 pipers) may have an additional master pipe which is necessarily finely tuned to the original master pipe and there needs to be someone behind the pipe who knows what they are doing. For most bands, one master pipe is sufficient. The master pipe needs to be very accurately tuned in all respects, but particularly chanter intonation. If the master pipe has a slightly sharp F, or flat D or whatever, then the whole pipe corps will end up having the same flaws.

Prior to setting up the pipe corps, the master pipe should be well tuned (drones) and the chanter intonation checked against the drones and any imperfections remedied prior to setting any other chanters. The pipe major (or sound person in the band) needs to get this right – if you do not have anyone who is remotely competent in this area, then a) get help from a qualified source, and b) ensure someone is being trained to do this.

Setting the Chanters

There are a number of ways to go about this. Depending on the starting point for your band, one way will suit better than another. If you are putting in brand new reeds, or the chanters are significantly different to each other, then a concentrated one-on-one effort is required. This is where each piper plays with the master pipe in turn to get their chanter at the same pitch and any major intonation anomalies fixed. The danger here is that by the time the last piper is getting their chanter set, the master pipe may have increased in pitch meaning that chanters set later in the round will be higher pitched than those set early. There are ways to mitigate this – set 2-3 chanters then play together as a band for 5 minutes, then set another 2-3 chanters. Another way is to ensure all pipers are playing their pipes whilst the chanter setting is being done.



At the same time as the chanters are being set, someone should also be tuning the drones to the master pipe. This can either be done by ear or with the aid of an electronic drone tuner. When the band comes together to play, the drones will not be a bulls roar away from each other and this will make the drone tuners job a lot easier and faster.

Fine Tuning

We are not there yet, at any grade level! Once the chanters are set at the right pitch and drones have been set to the master pipe, it is time to rectify any minor anomalies with the chanters. Many bands will be fortunate to start at this point straight from when the pipes are taken out of the box; indeed this should be the case with all bands, particularly at this stage of the competing season.

Once all pipers have arrived for the band practice, they should all be sent away to warm their pipe up for 5 minutes and to tune their drones. An alternative to this is to play as a pipe corps right from the start. Once this warm-up period is complete, the pipe corps should come together and play. Any major chanter deficiencies should be rectified straight away. The tunes should be simple tuning-up tunes which may be the street march tunes or any other brackets that the pipers all know and play well. The pipe major (if playing) can get a pretty good idea of where all the chanters are set by moving around the inside of the circle in front of each player listening to each piper's chanter in relation to his/her own. A different method could be the pipe major/sound person moving around the inside of the circle not playing and listening for any chanter deficiencies.

Once the round is complete and the pipe major/sound person has a good idea of where any deficiencies are, the pipe corps will stop playing and 2-3 pipers will have their chanters rectified before the pipe corps commences playing again (to keep all the pipes warmed up to the same level). Once the next bracket or excerpt of medley is completed, another 2-3 pipers have their chanter deficiencies remedied...and so on until all pipers have been checked individually.

Another method is for each pipe to be set to the master pipe(s) during the individual warm up period. This provides a good initial check on where the chanters are sitting and any glaring problems can be fixed early.

It is important that each piper is blowing well at all times so that the chanters can be accurately set. Too often, chanters are blown differently one-on-one with the master pipe than in the full band scenario.

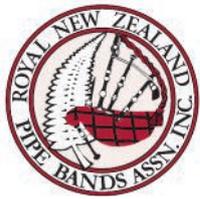
Whatever method or combination of methods are used, we should now be at a point where the band has the chanters (and drones – more on these in a while) finely set. The band practice/rehearsal can now get seriously underway. Tuning and re-tuning will more than likely go on throughout the rehearsal as pipes warm or the evening gets cooler if you are playing outside. The pipe major will be getting a pretty good idea about how stable the sound is and how much re-tuning is required and where the problematic pipes (and pipers!) are. I always found it pretty useful to move around the circle, putting myself between every other piper in the band in turn to see exactly how their chanters were blending with my own. Essentially, this is another check on the chanter setting work that has already been done. Regardless of the level of band you are in, you the pipe major, and you the piper, should be continually listening to the sound and alerting the pipe major to any problems that arise in your section of the pipe corps.

Drone Reed Selection

We have covered the essentials of steadiness, reliability, quality of sound and volume. The first two elements are relatively easy to achieve – some simple trial and error is all that is required. The remaining factors of sound quality and volume require a little more thought.

Volume. Volume of the drone sound is an important part of the overall pipe corps sound. If the chanters are quiet relative to the drones, then the chanter sound will not penetrate and the pipe corps will sound drone heavy. If the drone sound is quiet relative to the chanter sound, then we have too much penetration of the chanter sound and the overall impact of the pipe corps will tend to be shrill. We also have the issue of bass drone volume and tenor drone volume to consider.

- a. **Bass Drone.** Most will agree that we need to achieve a fairly robust bass drone volume to balance the predominantly 'tenor' sound of the chanter and tenor drones. We should look for a make of bass drone reed that will give us this robust sound and that will suit the majority of makes of bagpipe we have in the band. Make sure that the bass is easy to tune to the tenors and stays locked in there – we may find a bass drone reed with a good sound but it is not easily tuneable or varies too much with unsteady blowing. Also, make sure that the bass drone reed is efficient in that it is not taking too much air.



- b. **Tenor Drone.** Many bands opt for their pipers to play only one tenor drone in order to cut down on the tenor drone volume and/or to make the pipes easier to blow for the pipers. Many synthetic tenor drone reeds are relatively quiet. To achieve a good tenor drone sound and volume, it may be necessary for the majority of your pipers to have both tenor drones operating. If you have selected a make of reed that has a relatively robust/louder volume, then you may be better off have most pipers with only one tenor drone operating.

The Pipe Major needs to stand outside the band and have a critical listen to the bass vs tenor drone volume, and the overall drone volume vs the chanter volume. Only then will he or she get an accurate reading on the overall sound balance the pipe corps is producing.

Sound Quality. The main issue with cane drone reeds is steadiness. The quality of sound they produce is universally accepted as being superior to that of synthetic drone reeds. However, remember, if we have not achieved a steady sound, then it does not matter how high quality that sound is if it is not in tune! All synthetic drone reed makers are trying to get as close to a cane drone reed sound as possible. Some achieve this more than others!

One of the main differences with cane vs synthetic drone reeds is that cane drone reeds produce more harmonics, and feel/sound more 'alive' than synthetic drone reeds. If your band can get cane drone reeds steady, and reliable, you will more than likely be producing a superior drone sound to any band playing synthetic reeds. Yes, a more challenging road to go down, but the rewards may just be worth it!

A good Plan B is always required, and if we are not comfortable with taking the cane drone reed route, we need to select a make of synthetic drone reeds that will give us as close to the sound we are looking for as possible. A key deficiency in many pipers' armouries, is that they are blissfully unaware of what a good cane drone reed sound is, and may have never used (or seen!) a cane drone reed. This makes the task of choosing a suitable synthetic substitute more of a lottery.

A normal problem with cane bass drone reeds is their propensity to double tone/roar when striking the pipe in for the attack. What about selecting a suitable synthetic substitute that will give the required volume, steadiness and reliability, whilst compromising only on sound quality? The rich harmonics from the cane drone reeds coupled with the robust (but not overpowering) synthetic bass drone sound may be a very good compromise and one that is relatively easily managed. It will produce a

'warmer' drone sound that will harmonically interact more with the chanter sound and will, if properly tuned, produce a superior overall pipe corps sound. Worth a try?? At least one Grade 1 World Pipe Band Championship winning band is doing just this.

Drone Tuning Techniques

With the advent of relatively cheap bagpipe drone tuners, many if not all bands will make some use of this technology. This is fine. But (there always seems to be a 'but'!), the best drone tuner you have is a keen pair of ears! Electronic drone tuners are not always as accurate as we would like them to be, and our pipers are not always blowing as steadily/evenly as we would like them to, making the drone tuners job a difficult one. Drone tuners (the ones with batteries in them!) are notoriously poor at reading the bass drone level. Bass drones are far better to be set individually.

Methodology

It is important to have a plan for tuning the drones and to have a very good idea of how long it will take. This will take a lot of the guess work out of timing your run up to Point A at a band contest. Each band will have a slightly – maybe even a significantly – different approach to drone tuning. It does not matter – as long as the end result is a consistently well tuned pipe corps. I have outlined one methodology below:

- 1) Drones tuned to the master pipe during the initial one-on-one warm up phase using either the ear and/or a drone tuner.
- 2) Master pipes' drones checked before initial pipe corps tune together.
- 3) During the tune-up tunes/phase of the practice, the drone tuner moves around the pipe corps setting/re-setting/checking the drones. This should occur regularly through out the rehearsal and continuously during the warm-up for a contest. There will also be a requirement for the master pipe to be re-tuned and a new reading taken before going around the rest of the drones again.
- 4) Following the warm-up and before the rehearsal proper gets underway, each piper in turn should blow up individually to ensure their drones have been correctly set, particularly the bass drone. This action should also be factored in immediately prior to moving to Point A at a contest.

Tuning drones is not a rocket science, but it does need a competent person to do the job as it does take some skill.

