## Scrutineering 101

The system used for awarding results for DanceSport events is called the 'Skating System'.
Competitors and supporters of DanceSport events are often confused by the system used to arrive at results. While the rules of the Skating System are logical, they are not straight forward and do require some explanation. At first glance many make the mistake of assuming that the Adjudicator's marks are simply added up somehow, or that the couple with the greatest number of 1st places will be the winner. Part of the confusion comes from the name, 'Skating', and people assume that our DanceSport system is similar to the ice-skating scoring that is seen on T.V. This is definitely not the case.

## A Short History

To appreciate why the Skating System has been adopted by DanceSport it is necessary to look at why the system was invented in the first place. The problem that Competition Organisers struggled with in the early 1900's was a way to get results with more than one couple on the floor at the same time and make those results creditable. Of course there are plenty of stories of a single judge standing on a stage with hundreds of couples on the dance floor and that judge picking a winner. This method was not popular then and would not be tolerated today.
If you look at Gymnastics or Ice Skating, there is only one competitor (or couple) being assessed at a time. This does allow judges time to allocate a score to various aspects of the competitors performance. In modern day scoring of these types of competitions usually the highest and lowest marks are removed and the remainder used to create an overall score.
The removal of the highest and lowest scores are to help remove the 'human error'. Human error could be as simple as the judge didn't see it, or more abstract as a bias towards a particular style. Nevertheless, Ballroom

Dancing in the early 1900's needed a way to score multiple couples performing at the same time whilst removing 'human error'. In essence, obtain a creditable result that everyone was comfortable with.

It is documented that in 1937 a form of the Skating System was used at the British Championship in Blackpool, however the system was not adopted by the Official Board of Ballroom Dancing until January 1, 1947. At this time the system was a set of 10 Rules which are the backbone of the system we use today.
There have been several revisions to the system which were designed to fine tune the Results in ways to make the system fair for all. The last of these revisions took place on 25th June 1956 when rule 11 was added to the existing 10 rules. FYI, Rule 11 is the ultimate tie breaking tool which allows for a count back of Adjudicators points over all dances and up until this rule was introduced there were a great many more 'ties' in competitions.
Since 1956 the Skating System has become the standard scoring arrangement for many forms of dance, not just DanceSport.
In 1982 the first computer program to handle the Skating System (DanceScore), was developed and today we use fully automated servers connected by a wireless network to process the rules of the Skating System.

## Adjudicating a DanceSport Final

Have a look at the problem from the Adjudicators perspective. Imagine that you are judging a competition with 6 couples on the floor dancing.
Realistically you will have about a minute to give each couple a score, of course the music will be longer but it takes time for the couples to commence their perform and a true assessment can only be made when all couples are dancing.
If the performance was assessed similar to Skating, Gymnastics or Diving the Adjudicator would have to watch each couple and then decide on a
score for particular components of the performance such as Artistic and Technical merit. With 6 couples and a minute of valid assessment time you would have just 10 seconds for each couple, an impossible task. This is where the Skating System comes in. Adjudicators are not required to 'score' each couple but rather they are only required to place the couples in the order in which they feel is correct. Adjudicators are not assessing couples to some utopian ideal such as the old style ice skating scoring, which required a mark out of 6.0 , but are simply placing couples in order from 1st to last. This works because you can compare all couples at the same time, in fact the system requires that all couples in a final be placed and Adjudicators cannot 'tie' couples, that is, give two couples the same place. This is not allowed.
Not allowing Adjudicators to 'tie' couples forces them to make a subjective decision, that is for whatever reason one couple must be better than the other. This might seem unfair to Adjudicators but consider the alternative. If the system allowed Adjudicators to 'tie' couples on the same place how many Adjudicators would opt for the easy way out when the going got tough. I know from personal experience there can be only the slightest of margins between first and last, but once written down the reality of Adjudicating can look harsh.
Of course you, the Adjudicator, are not alone. Most competitions use between 5 and 9 Adjudicators, although depending on the Organisation there may be up to 15 . There is also a preference to use an odd number of Adjudicators as this assists in reducing the possibility of a tied result. It should be noted that the Skating System does not require the use of an odd quantity of Adjudicators to obtain a result.
It would be rare that all Adjudicators agree on the order in which the couples are to be placed, very rare in fact. There are many reasons for this such as a personal preference to importance of the various aspects of a couple's performance. You should also take into account that the Adjudicators are spread around the dance floor and do not see the performance of the couples from the same perspective.

At the conclusion of the final all the Adjudicators will have either written their 'Order of Preference' on a piece of paper, or used an electronic device such as a Tablet to record their marks. The marks are then passed to the Scrutineer who will apply the Skating System formula. Prior to the 1980's all scrutineering was done by hand, that is Adjudicator marks were written on paper and all the rules and calculations done by the scrutineer. In 1982, DanceScore, the first of the computerised scrutineering programs was written, which assisted scrutineers by providing results as quickly as the Adjudicators' marks could be typed into the computer. With current technology the Adjudicators' marks are sent wirelessly direct from the Adjudicator to the scrutineering program providing instant results.

## Majority Rules

As with many parliamentary voting procedures around the world, the Skating System will obtain a result when a 'Majority' is reached.
A 'Majority' is defined as more than half, so for; 6 Adjudicators the majority is 4

7 Adjudicators the majority is 4
8 Adjudicators the majority is 5
9 Adjudicators the majority is 5
And so on......

Consider an example of 9 Adjudicators judging a single dance competition. For any couple to win this event outright they must be marked 1st by the majority of Adjudicators. The majority of 9 is 5 , therefore at least 5 Adjudicators must mark you first for you to win outright.
The majority rule works both ways to protect couples from 'human error' (or bad Adjudicators depending on your point of view), in a similar manner to scoring systems that remove the highest and lowest scores. While dancing the above event one Adjudicator may have considered you to be placed last but if the majority have marked you into 1st place you win the competition. In fact 4 Adjudicators could have marked you in last place but
you will still win outright if the majority of Adjudicators have marked you into first place.
In reality Adjudicator marks tend to be widely spread, consider the example below from an actual competition.

| Cha Cha Cha | Back <br> Number | A | B | C | D | E | F | G | H | I | Placing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 35 | 2 | 2 | 1 | 6 | 5 | 5 | 3 | 4 | 3 | 3 |
|  | 36 | 1 | 1 | 6 | 2 | 1 | 2 | 5 | 2 | 1 | 1 |
|  | 37 | 4 | 4 | 7 | 5 | 7 | 7 | 6 | 7 | 6 | 7 |
|  | 38 | 3 | 6 | 4 | 7 | 6 | 4 | 4 | 3 | 4 | 4 |
|  | 39 | 7 | 3 | 2 | 3 | 2 | 3 | 1 | 1 | 2 | 2 |
|  | 40 | 6 | 7 | 5 | 4 | 3 | 6 | 7 | 5 | 7 | 6 |
|  | 46 | 5 | 5 | 3 | 1 | 4 | 1 | 2 | 6 | 5 | 5 |

A quick count of the 1st places each couple have received shows that no couples have a majority of 1st places. Couple number 36 has the most 1st places, $4 \times 1$ st places out of a possible 9 . The majority required for 9 Adjudicators is 5 , therefore no couple in this dance has won outright. As no couple has a majority of 1 st places, we turn our attention to the 2nd place marks. This time we count all the 1st and 2nd places and we find that two couples now have a majority of 1st \& 2nd places. Couple number 39 has a total of 5 and couple number 36 has a total of 7 and as couple number 36 have the greater total, they are awarded 1st place. FYI, if it turned out that both couples had an equal quantity of 1st \& 2nd places, the scrutineer would then add up the arithmetic value of each of the places, (i.e. $1+1+2+1+2+2+1=10$ ), the couple with the lowest aggregate would be the winner.

But wait there's more......
If it turned out that both couples had the same aggregate the whole process would be repeated for these two couples and the 3rd place marks would be considered. If the count of 3rd and above is the same for each then the paces would once again be added to produce a sum. This procedure is repeated until a winner is found.

A tie will only be awarded for this dance one all places have been accounted for.
You can see from this simple example that the Skating formula is designed to seek out the couple that has performed with the best overall consistency. Of course, we have only discussed first place here but the basic concept remains the same for all other places.

## Multiple Dance Events

The example shown above was only of a single dance and there are many events that consist of multiple dances. There are Skating System rules to cover these events.
Essentially the place gained in each of the Dances are added together to form a 'Final Summary'. The couple with the lowest total in the Final Summary wins the event. As you would expect there are rules to deal with couples that are tied in the Final Summary.
The ultimate tie breaking rule is Rule 11 which was the last one added in 1956.

Under circumstances where the Scrutineer cannot separate couples by the points in the Final Summary, the Scrutineer must go back and analyse all the marks across all the dances in the final. This is somewhat similar to the method used in determining the winner of a single dance, just on a grander scale.
Imagine a 5-dance event that has 9 Adjudicators. If a Rule 11 was to be invoked say for 1st and 2nd place the Scrutineer will add up all the first places for the couples tied over all five dances and see if a majority has been reached. However, the majority will not be 5 this time but rather 23. You see the maximum 1st places available will be 45, (9 Adjudicators $\times 5$ Dances), therefore the majority of 45 is 23 .
Further, should a tie occur on the quantity of places then the places are added together the same way it was done for each dance. It that is tied the Scrutineer will add the next place into the formula. This will continue for those couples that are involved in the Rule 11 until a result is reached.

## Other Rules that Affect Results

The Skating System itself only refers to those 11 rules adopted by the Official Board of Ballroom Dancing, however there are other rules imposed by various Organisations and Competition Organisers.
These rules are usually specific to certain countries. For example, to disqualify a couple in some countries it requires 2 Adjudicators to mark the couple for disqualification. Some Organisational bodies require a Majority of Adjudicators to disqualify. In some organisations Adjudicators are not allowed to disqualify, it is up to the Chairman of Adjudicators to perform this task.

Even the term "disqualify" changes meaning. In some instances, a disqualified couple is completely removed from the competition, stripped of all marks. For others it means that the couple will come last but only in the dance they were disqualified in.
The best advice to competitors is to make themselves familiar with the rules and regulations of the Organisations that they wish to compete in.

## In a Nutshell

The Skating System is no accidental formula, it is the product of many minds over years to create a system at has become universally accepted.

## The Skating System:

- Is the only realistic method of assessing competitions where there is more than one competitor performing at the same time.
- Forces Adjudicators to make decisions and not tie competitors.
- The 'Majority' aspect of the formula shields competitors from poor Adjudicating decisions.
- Awards results based on overall placing.

Criticism heard from ill-informed people about the Skating System is often not about the system itself but rather the Adjudicating decisions made.

Whether scoring comparative or absolute there is always the 'human error' factor and this should not be confused with the system.

With the current level of technology we enjoy there is no excuse for all Adjudicator marks not to be published on the internet for all to see. It is only this level of scrutiny that will convince Competition Organisers to employ professional Adjudicators whose decisions are beyond reproach.

