



WORLD ROWING INSTRUCTIONAL MANUAL FOR PARA ROWING PHYSICAL IMPAIRMENT CLASSIFICATION

The purpose of this manual is to guide World Rowing Classifiers in the completion of the classification process for all athletes with a physical impairment. The World Rowing system of classification aims to group athletes into sport classes for competition in Para Rowing.

This manual supports the World Rowing Para Rowing Classification and Event Regulations which is intended to be used in association with in-person training in the development of World Rowing Classifiers.

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WORLD ROWING CLASSIFIERS

The World Rowing Executive Committee of World Rowing shall appoint the Classification Advisory Panel (CAP), who will work alongside the World Rowing Classification Coordinator. The CAP will appoint the members of any classification panel and a Chief Classifier, as needed. A World Rowing Classifier is an individual who has been approved as such by World Rowing and the CAP after undergoing the required World Rowing classifier training for this purpose. There are 2 types of World Rowing Classifiers:

- World Rowing Medical Classifier: a medical doctor, physiotherapist, or occupational therapist (experience with para rowing is recommended);
- World Rowing Technical Classifier: a person with extensive knowledge of rowing with experience such as a rowing coach, sport scientist, former rower, or similarly qualified person.

All World Rowing Classifiers are required to adhere to the Classifiers' Code of Conduct at all times. Please refer to Appendix 2 for the Classifiers' Code of Conduct.

PRE-CLASSIFICATION ELIGIBILITY CHECK

An athlete's Member Federation (MF) shall upload all required relevant medical documentation via the World Rowing Database no later than 45 days prior to the date of classification. The purpose of this documentation is to allow the Chief Classifier or CAP to verify that an athlete's activity limitation(s) are the direct result of an underlying health condition which has resulted in a permanent and verifiable impairment which is eligible for para rowing. Upon receipt of the medical documentation, the Chief Classifier will review and either accept the documentation as uploaded, or may request the MF to provide specific additional information. If the documentation submitted is not sufficient to verify that the athlete has an underlying health condition which has resulted in a permanent and verifiable impairment, a classification appointment will not be scheduled.

Documentation to be submitted and reviewed:

- A World Rowing Medical Diagnostics Form signed by a Medical Physician, including the additional required documentation that is related to the permanent impairment which makes the athlete eligible to compete as a Para Rower. **This must be in English, or be accompanied by an English translation.**
- Athletes with a Visual Impairment (VI) must provide proof of prior International Blind Sport Association (IBSA) classification with a sport class, or have their ophthalmologist complete the VI Medical Diagnostics Form in preparation for classification by an IBSA classification panel in collaboration with World Rowing.

PREREQUISITES FOR CLASSIFICATION

Athletes who are seeking to be classified as a Para Rower must present to the Classification Panel **the following classification paperwork:**

- A completed Athlete Evaluation Consent Form
- An uncompleted World Rowing Para Rowing Classification Form (for athletes with a physical impairment only)

For athletes with a Visual Impairment (VI), the VI Classification Panel will review all paperwork and evaluate athletes using the International Blind Sports Federation (IBSA) Classification regulations and sign the form where appropriate, indicating the correct sport class. Processes encompassed in the classification of athletes with VI are developed and regulated by IBSA and are not included in this manual.

PROCESS FOR CLASSIFYING ATHLETES WITH A PHYSICAL IMPAIRMENT

The standard World Rowing classification process is conducted by a World Rowing Classification Panel comprised of 2 World Rowing Classifiers, 1 of whom must be a World Rowing Medical Classifier and 1 a World Rowing Technical Classifier. The process for classifying athletes is called the Athlete Evaluation.

The Athlete Evaluation involves four parts:

1. Athlete Interview
2. Bench Test – performed by a World Rowing Medical Classifier with World Rowing Technical Classifier in attendance
3. Ergometer Test – performed by a World Rowing Technical Classifier with World Rowing Medical Classifier in attendance
4. Observation while Rowing– performed by both a World Rowing Medical Classifier and a World Rowing Technical Classifier. This may be conducted during training and/or in competition.

Materials Required for a classification room:

- Bench (plinth/mat table)
- Goniometer
- Standard chair (height approximately 45 cm)
- Hand sanitiser
- Cleaning spray or wipes for the equipment
- Gloves and masks
- Ergometer with sliding seat
- Ergometer with fixed seat and seat clamps
- Appropriate and additional strapping to complete test
- Appropriate cushion to prevent tissue breakdown (ideally use the athlete's cushion)
- Tape measure and tools required for adjustment of the ergometer and the fixed seat

The athlete must present ready to be classified in training attire and the athlete should bring along:

- all sport equipment including but not limited to seat, cushions, straps, braces and prosthetics.
- a recognised form of photo identification (government issued passport or ID)

Each athlete can have **1 person** to accompany them:

- A minor (under 18 on the day of classification) must be accompanied by a member of the relevant MF appointed with responsibility for the athlete.
- The accompanying person may not influence the Athlete Evaluation in any way.

The Athlete Evaluation is conducted in English. The respective MF is responsible for arranging for an interpreter to be present. If an interpreter is present, they can be the second support person in the room with the athlete.

PART ONE: DOCUMENTATION REVIEW AND ATHLETE INTERVIEW

Completed by the Classification Panel

Document Check

Classifiers should view the provided documentation on the World Rowing Database, where it was pre-approved. This includes:

- The Medical Diagnostics Form signed by a Medical Physician
- Additional required documentation that is related to the permanent impairment which makes the athlete eligible to compete as a Para Athlete

Classifiers should also review the completed World Rowing Para Rowing Classification Consent Form, provided by the athlete

If additional documentation is required to verify that an athlete's activity limitation(s) are the direct result of an underlying health condition which has resulted in a permanent and verifiable impairment, the Athlete Evaluation may not continue until further documentation is provided. In principle, the documentation will have been pre-approved by the Chief Classifier to avoid these situations. However in rare cases when this has not been identified in advance the Athlete Evaluation will not continue.

Interview Process

- Ask for photo identification.
- Explain the classification process and answer all the athlete's questions about classification before proceeding with the rest of the Athlete Evaluation:
 - Ask about any medical complications that may arise during the classification and what steps to follow if they arise.
 - Ask about allergies (such as latex allergies, if wearing latex gloves).
- Ensure all diagnosis information is correct and detailed. The athlete should disclose any medication/medical devices/implants and what the impact is on their function.
- Ask about past medical history.
- Ask the athlete about length of time they have been a rower (para or able bodied) and about their competition history in any sport.
- Ask about other sport participation and existing or previous classifications.
- Ask for more information about the disability/impairment if needed. *Note that all information provided should be supported by medical documentation in order to be considered in the sport class allocation of the athlete.*

PART TWO: BENCH TEST

Process for the Bench Test

The aim of the Bench Test is to assess function to determine whether the athlete meets the minimum requirements to compete as a Para Rower. The results from the bench test will help to guide the ergometer testing. The bench test is completed by the Medical Classifier with the Technical Classifier observing/assisting. The Technical Classifier can assist the Medical Classifiers in completion of the forms. The Medical Classifier must ensure that the forms are completed correctly.

The Bench Test consists of the following tests:

- Active Functional Range of Motion (AFROM)
- Strength and/or Coordination
- 90-Degree Squat Test
- Long Sit Test

Active Functional Range of Motion (AFROM) Testing

- Assess for AFROM and if restricted then measure the active range with a goniometer.
- Assess both active and passive to ensure a full understanding of the athlete's abilities.
 - If there are limits, for instance due to muscle weakness or tightness then the medical classifier should test Passive Range of Motion to determine if there is a difference between active and passive range.
- Documentation
 - Document AFROM by documenting the flexion and extension measurement
 - Score for each joint in the space provided as well as the total AFROM.
 - Document the functional active score; 0-10 on the assessment chart.
 - If an athlete has more than the standard AFROM, place the ">" sign before the number.
 - Make an additional note about the passive range of motion and end feel if restricted.
 - Refer to charts on defining the active functional range of motion for each joint.
 - If an athlete has an amputation, a score of "0" is entered for the affected joint(s).

Starting positions for AFROM:

These are the starting positions for AFROM where no joint or strength restrictions are anticipated. The positions below need to be adapted based on clinical judgement.

Positions for AFROM	
Seated	shoulder flexion and extension elbow flexion and extension wrist flexion and extension finger flexion and extension knee extension ankle dorsiflexion ankle plantar flexion
Supine	hip flexion knee flexion hip extension

Strength and Coordination Testing

Strength testing – manual muscle testing

Grade	Manual muscle testing 0-5 scale used in para rowing classification
5	Normal power through the full range of movement
4	Active movement against gravity and resistance through the full range of movement
3	Active movement against gravity through the full range of movement
2	Active movement with gravity eliminated
1	Flicker or trace of contraction

- A “break” test at the end of range can be performed on muscles where no weakness is expected.
- If any weakness is observed manual muscle testing through the full range of motion is performed using the 0-5 scale and documented with points 0-5 on the assessment chart.
- The +/- scale is not used for the purpose of this test.
- If an athlete has an amputation, a score of “0” is entered for the affected joint(s).
- The positions below need to be adapted to reduce gravity for strength lower than grade 3, e.g., side-lying, or to adapt for joint contractures.
- If an athlete has a central nervous system disorder, assess coordination in addition to muscle strength, and note that coordination was assessed. When both coordination and strength are tested, only the lower score (i.e. overall strength or overall coordination) should be considered in the total score.

Starting positions for muscle testing

Seated	shoulder flexion and extension* elbow flexion and extension* wrist flexion and extension finger flexion and extension knee extension ankle dorsiflexion hip flexion
Prone	hip extension knee flexion ankle plantar flexion*
Standing	ankle plantar flexion*

**Ideally, ankle plantar flexion should be tested using a single leg heel raise, but if this is not possible, you may test in the prone position. Shoulder extension and elbow extension shall be assessed in prone if there is any impairment to that limb.*

Grade	Ankle plantar flexion
5	25 heel raises through full range, without rest or fatigue
4	10-24 heel raises through full range, without rest or fatigue
3	1-9 heel raises through full range, without rest or fatigue
2	Heel raise: able to clear the heel from the floor, unable to get up on the toes to reach full range In prone: able to complete plantar flexion through full range against maximal resistance
1	In prone: Flicker or trace of contraction
0	In prone: no palpable contraction

Coordination Testing

- Many athletes with Central Nervous System Disorders have coordination deficits.
- When assessing coordination, it is important to consider available range of motion, left vs. right symmetry, fluidity of movement, any apparent spasticity.
- The medical classifier can ask the athlete to perform activities like running, hopping, walking tasks, braided walking and squatting. These tests will help assess for coordination and inform the classification panel about the functional abilities of the athlete to be further tested in a rowing specific manner.
- If an athlete has bilateral involvement, left vs. right is not as important as consideration of “normal” movement patterns. Consider what type of movement is expected, and what movement patterns are observed.
- Refer to Test Instructions for Coordination for Athletes with CNS Disorder for more detailed information.
- Assessing coordination is performed using the 0-5 scale and document the points 0-5 on the assessment chart.

Grade	0-5 Scale for Coordination in Para Rowing Classification
5	Able to move from start to end positions fluidly and consistently, maintaining full ROM of this movement during fast movement
4	Almost full ROM, with slight spasticity and slight increase in muscle tone and/ or slight coordination problems
3	Moderate ROM, moderate spasticity, with tone restricting movement and/or moderate coordination problems
2	Severely restricted ROM, severe spasticity-hypertonic muscle stiffness present and/or severe coordination problems
1	Severely restricted ROM due to severe hypertonic muscle stiffness and/or very minimally coordinated movements
0	No functional movement at all

Positions for Coordination Testing

Seated on bench or assessment table	shoulder flexion and extension elbow flexion and extension wrist flexion and extension finger flexion and extension knee extension and flexion ankle dorsiflexion and plantarflexion
Seated on ergometer on sliding seat with feet strapped	slide forward and backwards using only the legs varying between fast and slow pace

- Test all joints in sitting, sequentially, 1 joint at a time.
- The test will begin with each joint at full extension and end with the joint at full flexion simultaneously on both sides, starting slow and then increasing the speed over time to assess the following:
 - Assess left vs. right symmetry of movement
 - Consider the available AFROM
 - Apparent tone or spasticity and fluidity of movement
 - Speed and quality of movement

Confirmation of Minimum Impairment

- Enter the scores at the appropriate line on Functional Classification Assessment Chart, and total them below where indicated.
- All joint AFROM and strengths must be tested and scores entered. Failure to do so will result in an incomplete and therefore non-valid classification of the athlete.
- When both coordination and strength are tested, only the lower score (i.e. overall strength or overall coordination) should be considered in the total score. The AFROM score is always included in the total points score.
- Ensure that one of the minimum impairment criteria is met before completing the bench test.
 - Full loss of at least 3 fingers on 1 hand
 - Trans metatarsal amputation on 1 foot
 - Loss of 10 points on 1 limb or 15 points across 2 limbs using the Functional Classification Assessment Chart
- If the minimum impairment criteria is not met, ensure that all the tests were performed in the correct position. Retest if needed and if it remains the same then issue the sport class of Not Eligible (NE) Review, and the Athlete Evaluation will end here. An athlete classified as NE Review receives one automatic reassessment immediately following initial classification (or as soon as possible). If minimum impairment is **NOT** met in the second Athlete Evaluation, then the sport **class Not Eligible (NE) Confirmed is issued**.
- If the minimum impairment criteria **IS met, continue with the rest of the Athlete Evaluation**

All findings must be documented on the Para Rowing Classification Application Form for Physical Disabilities.

90-Degree Squat Test

The purpose of this test is to assess whether an athlete has reasonable functional strength of the quadriceps and other leg muscles to perform the sliding motion in the boat and provide power to propel the boat through the water.

1. The athlete will stand without external assistance. If an athlete uses a prosthesis or orthosis, this test may be completed with and without the device to determine best function.
 - a. Minimal balance assistance may be given for safety (e.g. hand to hand support by the classifier). Document the amount of support given.
2. The athlete will squat, with two legs or one leg as able, flexing the knee(s) to a 90-degree angle.
3. The athlete will then return to a full standing position.
4. If the athlete is able to complete this test, this is recorded as a pass. A pass guides the classification panel to consider the sliding seat in the ergometer testing.
5. If the athlete is not able to complete this test, (including an athlete in a wheelchair or with significant leg weakness) this is recorded as a fail and the classification panel should consider both the sliding and fixed seat in the ergometer test.
 - a. If an athlete fails the test, the reason for failing the test must be documented clearly.
6. For athletes with no AFROM in both legs or if it is unsafe to perform the test, classifiers may skip this test and document the reason.

If there is any doubt as to a pass or fail, clearly document the findings as to why the decision was made. This documentation shall support the final decision of the sport class for the athlete.

An isolated failure of the squat test does not exclude the requirement for a sliding seat evaluation. All findings must be documented on the Para Rowing Classification Application Form for Physical Disabilities.

Long Sit Test on Bench

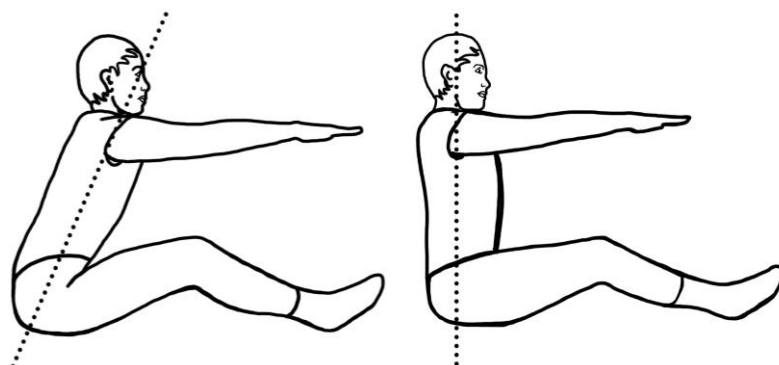
The long sit test is used to assess whether the athlete has the ability to perform trunk swing (per definition below), to lean forward and return to an upright position with strength to assist with boat propulsion through the water.

Trunk swing definition - Trunk swing during the rowing stroke can be described as flexion and extension of the trunk as a lever pivoting around the hip joints. During the drive of the rowing stroke, extension through the spine may also be noted; however, the pivot point of movement will be the hip joint with posterior rotation of the pelvis. During the recovery phase of the rowing stroke, this movement is reversed, and the trunk is flexed forward by pivoting at the hip joint. Flexion through the spine may be noted as this movement may be associated with the reach forward into the catch position.

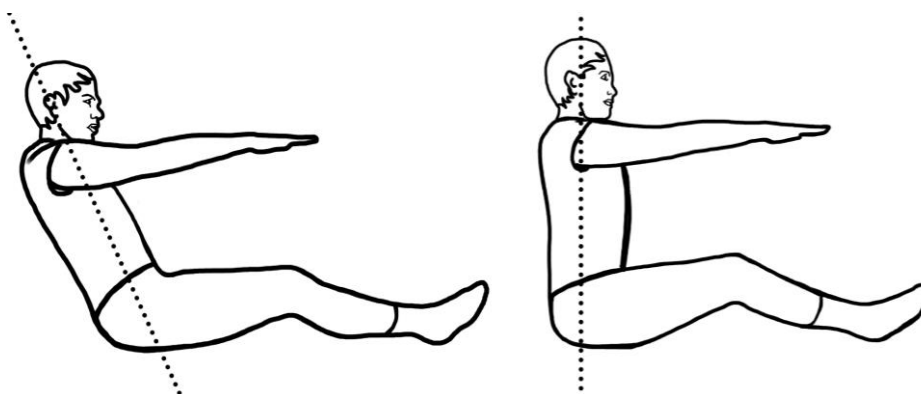
The test is done in 2 parts: First on the bench and repeated on the ergometer as part of the ergometer testing.

If the athlete uses a prosthesis or orthosis, this test should be performed with and without the device to determine which gives the athlete the best function.

1. The athlete shall sit in a long sit position on the bench with legs as straight as possible considering hamstring length. The legs can be stabilised if required to assist with balance.
2. The athlete shall lean the trunk forward to approximately a 30–45-degree angle from a neutral sitting position, without using the arms for support.
3. The athlete shall hold this position for 3 seconds then return to the upright position without using the arms.



4. The athlete shall then lean backward to approximately a 30-degree angle at the trunk, from a neutral sitting position, without using the arms.
5. The athlete shall hold this position for 3 seconds and then return to upright position without using the arms.



6. If the athlete is able to do the above tests, repeat the tests while providing minimal resistance against the movement in both directions.
 - If the athlete is able to complete all parts of the test, it is considered to be a pass.
 - If the athlete is not able to complete the test on the bench, the reason for failing must be documented clearly on the form. If there is any doubt as to a pass or fail, clearly document the findings as to why the decision was made. This documentation shall support the final decision of the sport class for the athlete. The long sit test shall be repeated in part 3 of the athlete evaluation on the ergometer. Record differences seen on the bench and on the ergometer.

An isolated failure of the long sit test does not exclude the requirement for a sliding seat evaluation. All findings must be documented on the *Para Rowing Classification Application Form for Physical Disabilities*.

PART THREE: ERGOMETER TEST

To be completed by World Rowing Technical Classifier with the World Rowing Medical Classifier assisting/observing.

The role of the ergometer testing is to assess the rowing motion when conducted on an ergometer. The ergometer test and the bench test will inform the Classification Panel of the athlete's sport class.

Re-evaluate the long-sit test on the ergometer

- Findings of the long-sit test on the bench will inform a more sport-specific version of the long-sit test performed while the athlete is on the rowing ergometer with a fixed seat. This is a sport-specific confirmatory test of trunk swing function.
- The athlete will be positioned on the ergometer with the athlete's feet in the foot stretchers and strapping to aid stability at the legs (proximal thigh), should be provided prior to testing. Positioning should focus on optimising the potential for effective trunk swing based on the findings of the bench test and the long-sit test on the bench e.g., accommodate for shortened hamstring length, and assist maintenance of balance.
- The same steps as per the long-sit test in the bench test should be followed.
- The classifiers should note pass or fail on the Para Rowing Classification Form with a clear reason for failing. Note differences seen on the bench and on the ergometer.

The General principles related to the Ergometer Testing

- Consider the results from all the tests prior to starting the rest of the ergometer testing.
- Strapping should not be used immediately. Start without strapping if possible.
- Observe the athlete from the front, back, and sides to gain a full understanding of their abilities.
- If the athlete uses a prosthesis or orthosis, the ergometer test shall be performed with and without the device. The sport class that is issued will be the more functional sport class (i.e. the larger number) either with or without the prosthesis or orthosis.
- If the athlete is not able to complete the ergometer testing on the sliding seat as a direct result of their impairment, or is not safe to be tested this way, a fixed seat will be added to the ergometer. The classifier should begin to assess the athlete performing with the least amount of assistance possible, without a chest strap. The medical classifier must guard the athlete to prevent falls.

Sitting Balance Assessment

The athlete's sitting balance should be assessed prior to carrying out a functional assessment on the ergometer. This is evaluated after having seen the athlete during the bench test as well as the long sit test on the ergometer.

- The assessment should be carried out on a standard sliding seat, if safe to do so, regardless if the athlete reports typically training on a fixed seat.
- If the athlete's sitting balance is poor, a postural support fixed seat may be used that is appropriate to the athlete's needs. Trunk strapping should not be used immediately. The sliding seat step may be eliminated if it is unsafe for the athlete to perform, i.e. athlete with poor sitting balance, complete paraplegia, or significantly poor leg strength based on the bench test.
- The athlete should sit upright in the seat.
- Evaluate static balance, trunk flexion/extension, and dynamic balance with and without the ergometer handle and observe what is moving – trunk (including pelvis), shoulders, arms or head. For example, observe and note what body part is moving or compensating for balance.

Ergometer Rowing Assessment Process

The steps to assessing rowing function on the ergometer.

- Assess with a sliding/fixed seat with/without straps as appropriate.
- The athlete will be asked to take enough strokes to represent their rowing ability, for example: start with arms and shoulders, then arms and trunk. If using a sliding seat then continue to ¼ slide, ½ slide, ¾ slide and full slide.
- At full slide the athlete should be asked to increase power to maximum effort at a stroke rate >30spm.
- Classifiers may request more detailed procedures, e.g. distance rowed over a certain time, average power, etc.
- The technical classifier should measure and note the length of the stroke, power, and ability to maintain the power over a period of time.
- Observe the athlete from the side, rear, and front for linear motion on the ergometer.

Please note that it is not always necessary/appropriate to do the full progression, however any deviation from the full progression should be clearly documented.

Trunk Flexion/Extension Assessment

- Describe the rower's trunk flexion and extension during the rowing movement.
- Consider and note the following:
 - Fluidity of movement.
 - Range of movement at the trunk.
 - Is the movement coming from pelvic rotation about the hip, or is movement coming primarily through the low back, the upper back or shoulder region?
 - Is the movement smooth or jerky?

Evaluation with Strapping

Strapping is used to optimise stability and safety as it would be in the boat. When assessing on the ergometer document the following with and without strapping. Record where the strapping was placed during testing.

- What happens to the power output?
- What happens with the rower's trunk swing, head control and balance?

Assessment of rowers with central nervous system (CNS) impairments

- Assessing athletes with diagnosed CNS impairments on the ergometer should begin at low stroke rates and continue to higher stroke rates similar to that of race rates.
- Athletes with central nervous system impairments may demonstrate a somewhat fluid, or normal looking stroke performance at low stroke rates, however at higher rates, movements may become ataxic, or jerky or the athlete may have significantly decreased range due to spasticity.
- Conversely, rowers who demonstrate predominately mild tone impairments and/or athetosis may perform the cyclical nature of the rowing stroke with more fluidity than anticipated.
- Ergometer assessment should continue for sufficient time and at high rates (race rates) to ensure that the classifiers have reviewed typical performance of the athlete as would be anticipated during the body of a race.
- Observe the athlete from the side, rear, and front for linear motion on ergometer. Check if the athlete is able to achieve good compression and obtain 90-degrees of flexion at the knees with trunk against or close to thighs.
- Is the athlete able to maintain power over time? (If not, consider why)

- Start the sliding seat assessment with stroke rates <30 spm to assess how the athlete performs the stroke.
- Observe the athlete to see if decreased coordination occurs during the rowing stroke at higher rates with a change in power output and/or reduced slide length.
 - *Note: With CNS disorders, it is common to see changes after 2 minutes due to the nature of some CNS impairments*

Sliding seat assessment of rowers with CNS impairments

- With higher stroke rates of >30 spm:
 - Classifiers should watch for difficulty in 1 or both legs in alternating between full flexion and full extension, from catch to finish.
 - This difficulty may be due to increased muscle tone with an increased velocity of movement.
 - This may also be seen in a significant decrease in stroke length with increasing stroke rate. Specifically, decreased compression may occur at the catch position due to decreased trunk swing, decreased knee flexion and ankle dorsiflexion occurring during the recovery. The finish position may demonstrate decreased extension of the legs. These are both a result of the abnormal tone, not of decreased flexibility alone.
 - Decreased coordination between leg drive, trunk swing and arm pull resulting in decreased fluidity and inability to row at higher stroke rates and maintain stroke length, may also be noted with or without the ability to accomplish the above positions.
- Consider a fixed seat assessment if the athlete shows an inability to maintain reasonably fluid stroke mechanics at higher stroke rates, along with decreased coordination during the slide portion of the stroke.

Fixed seat ergometer assessment of rowers with CNS impairments

- Describe the rower's trunk flexion and extension whilst rowing.
- During the fixed seat assessment, the rower's trunk swing mechanics may demonstrate an inability to maintain trunk swing resulting in decreased length of stroke possibly further reduced while rowing at higher stroke rates.
- Poor dynamic trunk control may also be demonstrated by an inability to maintain trunk movement into extension as arm pull is initiated, resulting in trunk movement to the handle rather than the handle being brought to trunk during the drive.
- Rowers with impaired trunk control may also demonstrate increased use of head movement to create the trunk swing movement.
- Consider PR1 if the athlete demonstrates limited contribution of the trunk swing to the drive.

Process for completion of Ergometer Evaluation Table:

Description of the athlete's Sitting Balance

The athlete should be sitting upright, legs in extension. This is evaluated after having seen the athlete during the medical assessment. This should also be conducted (if safe) on a standard ergometer seat first. If athlete's sitting balance is poor, then a postural support seat without strapping can be used. Evaluate static balance, trunk flexion/extension, and dynamic balance with and without the ergometer handle and observe what is moving – trunk, shoulders, head.

Description of the Long Sit Test on the ergometer

1. Evaluation Sliding Seat – If possible, evaluate how the athlete performs the rowing technique on the sliding seat. This may be skipped, if and only if, there is not enough balance, or there is poor muscle strength based on the medical evaluation. The reason for skipping must be

documented. Document the amount of slide length used, how much of the slide the athlete was able to maintain during the test.

2. Evaluation Fixed Seat – This is only conducted if the athlete is unable to demonstrate leg function on a sliding seat. This should be completed without any strapping first.
3. Evaluation Strapping – Document where the strapping was placed during testing. When assessing on the ergometer, consider power output, stroke mechanics, and balance with and without strapping.
4. Test with and without Prosthesis/Orthosis to determine the best function of the athlete – Document the difference between using and not using the device in terms of function.
5. Athlete able to use sliding seat – During the sliding seat test, is the athlete able to use their legs to move the seat on the ergometer? With an athlete with a CNS disorder, does the slide length diminish with change in power, or do they become more uncoordinated? Do they improve their power output and slide as would be expected with an able-bodied athlete? Consider the class the athlete trained in, this might be a new movement pattern to them and a sliding seat should not be immediately ruled out.
6. Athlete coordination <30 spm – How does the athlete perform the stroke at stroke rates <30 strokes per minute? Consider this over a longer period of time for athletes with CNS involvement as fatigue can affect performance.
7. Athlete Coordination >30 spm – How does the athlete perform the stroke at stroke rates higher than 30 strokes per minute? Does the slide length change? Does their coordination change? Does their power output change? Consider this over a longer period of time for athletes with CNS involvement.

Athlete Trunk Flexion/Extension – Describe the athlete’s trunk flexion and extension during the rowing movement. Consider fluidity of movement. Consider range of movement at the trunk. Is the movement coming from the pelvic area, or is it coming from the upper back/shoulder region? Is their movement smooth or jerky?

Trunk swing definition - Trunk swing during the rowing stroke can be described as flexion and extension of the trunk as a lever pivoting around the hip joints. During the drive of the rowing stroke, extension through the spine may also be noted; however, the pivot point of movement will be the hip joint with posterior rotation of the pelvis. During the recovery phase of the rowing stroke, this movement is reversed, and the trunk is flexed forward by pivoting at the hip joint. Flexion through the spine may be noted as this movement may be associated with the reach forward into the catch position.

8. Ability to Maintain Power Throughout Test – If the answer is “no,” documentation must be provided as to **why** power was not maintained during the test.

World Rowing Functional Objectives for each sport class

When assessing athletes in the ergometer test and through observation in training or competition the classifier/s will have regard to the functional objectives for each of the NE, PR3-PI, PR2 and PR1 sport classes as described in the World Rowing Classification Regulations and Bylaws. These are as follows:

Not Eligible (NE)

The NE sport class is for athletes who do not meet the minimum impairment required to be eligible to compete as a para rower.

Classification Not Completed (CNC)

The CNC sport class is given when a Classification Panel suspends the Athlete Evaluation. This may occur if an athlete fails to, or is physically or mentally unable to, comply with any classification rules or reasonable instructions given to them by a Classification Panel, if an athlete is unable to communicate effectively with the Classification Panel, or if the Athlete’s representation of their abilities is inconsistent with other information available to the Panel. A CNC sport class is not valid for competition.

PR3-PI

The PR3-PI class is for athletes with joint, strength, or coordination restrictions that impact the overall force production of the rowing stroke. These athletes can perform sufficient compression during the recovery and force production during the leg drive of the stroke. PR3-PI athletes have functional use of their legs, trunk and arms for rowing and can utilise the sliding seat to propel the boat.

PR2

The PR2 class is for athletes who have joint, strength, or coordination restrictions that do not allow sufficient compression during the recovery part of the stroke and results to an inefficient leg drive. PR2 class athletes have functional trunk swing* during the rowing stroke and require a fixed seat for rowing.

PR1

The PR1 class is for athletes who have joint, strength, or coordination restrictions that lead to a significant impairment in performing the trunk swing* and leg drive of the rowing stroke. The PR1 class includes athletes who predominantly apply force using the arms and shoulders for rowing.

Likely Conclusions

It is important to always confirm that what is being observed concurs with the bench test or can in some way be attributed to an eligible physical impairment. Keep in mind that the athlete may not be representing their true ability. Also keep in mind that any inadequacies on the ergometer may be due to lack of training, rather than a physical impairment appropriate to a particular sport class. A lack of training should not be a factor when determining the athlete's sport class – only function should be considered.

Sliding seat observations

- If the athlete is able to demonstrate and use at least 50% of the available slide and maintain power over 15-20 strokes, then the PR3 sport class should be considered.
- If the athlete demonstrates a significant increase in power when the slide is used then PR3 sport class should be considered.
- If the athlete is able to demonstrate full trunk swing but is unable to use 50% of the slide, or the equivalent compression to that observed in the squat test, (e.g. incapacity to flex 1 knee) the PR2 sport class should be considered.
- If the athlete is able to demonstrate full trunk swing and utilise at least 50% of the slide but power output either drops or increases only marginally over that achieved with the using the trunk and arms only then the PR2 sport class should be considered. Training history should be taken into account.
- In the cases of athletes with CNS impairment an inability to maintain reasonably fluid stroke mechanics at higher stroke rates, along with decreased coordination during the slide portion of the stroke would direct classifiers to assess this athlete for fixed seat rowing and consider the PR2 sport class. Take into consideration that increased time may be needed to witness the changes in coordination.

Fixed seat observations

- If the athlete is able to swing from the hips with the trunk movement away from the backrest of more than 30 degrees and maintain the swing over 15-20 strokes and do this with enough force to propel the boat, then PR2 sport class should be considered.
- If the athlete is unable to swing their trunk more than 30 degrees without a strap and maintain it over 10-20 strokes then PR1 sport class should be considered. If a strap is applied and power output increases, then consider confirming PR1 sport class.
- If the athlete is unable to lean forward from the backrest and return safely without the support of a strap, consider issuing PR1 sport class.

With classifications that pose difficulties, in particular with those athletes new to rowing, a review status is appropriate to allow reclassification following training and/or increased fitness. It is more appropriate to issue the more functional sport class if there is any question about the sport class.

Detailed documentation of the classifiers' findings is paramount to accurate classification and should be as complete as possible. The World Rowing Technical Classifier should record a clear statement on the application form of the athlete's functional ability as observed through the ergometer test, having regard to the World Rowing functional objectives for each sport class as recorded above.

Documentation should be written in sufficient detail that another classifier would be able to follow your thinking and process during classification. This is especially important for possible protests, and helpful to Chief Classifiers who observe para rowers' function during World Rowing regattas.

Remember that if the classification panel believes that the athlete's impairment may improve, or their lack of fitness or short length of time involved with Para Rowing may be affecting their sport class, they should receive Review Sport Class Status. This ensures that the athlete's status will be reviewed at least once a year. When issuing a Review Sport Class Status, also include a "Review by" date and the reason for the review.

If a PR3 athlete has lost at least 20 points in 1 limb, then classifiers note that they are eligible for the PR3 Mix2X boat class.

PART FOUR: OBSERVATION WHILE ROWING

Observation during training and/or in competition is done together by the World Rowing Medical and Technical Classifiers.

Objectives

The purpose of on-water observation is to confirm the classification status for the athlete and to verify issues related to balance or stroke mechanics not seen on the rowing ergometer.

Considerations on when to complete observation in training and/or competition:

- when the decision is not clear from the bench and ergometer tests
- to assess balance issues that may not be seen on the ergometer
- when medical and technical classifiers need more sport-specific observation
- when the athlete uses a particular piece of equipment (ie. Seat) which cannot be replicated/used on the ergometer
- on water observation should take place only during official training times when the event rescue team is on standby.

Observation Protocol

On-water assessments should be undertaken with consideration given to the water conditions and safety.

If necessary, the Panel may conduct an on-water Observation Assessment before allocating a final Sport Class and Sport Class Status. This can be arranged by request with the classification coordinator during a training period of the event where the classification is taking place.

The Panel may also conduct an Observation in Competition Assessment. If the Panel deems this to be necessary, they must specify to the athlete what is to be observed and why, how this is to take place and by whom.

The objective of the observation is to confirm the classification status of the athlete and to verify issues related to stroke mechanisms not seen on the ergometer. This test is not obligatory but is recommended where the bench and ergometer tests are inconclusive, sport-specific observation is required or additional observations are required in order to make an agreed determination.

The Classifiers may request the athlete being classified to perform a range of movements or tests and shall also observe the athlete during normal training and racing. The Classifiers shall satisfy themselves as to the correct sport class of the athlete concerned. The athlete can also be observed at any moment while representing their rowing ability. The classifiers shall observe the athlete while they are aware of being observed, and while he/she is not aware of being observed. If the athlete uses a prosthesis or orthosis, this test shall be performed with and without the device.

Personnel and Materials Needed

- Appropriate boat and oars for athlete (provided by athlete/MF)
- Appropriate rigging setup
- Crew members appropriate to the boat needed for the Sport Class (provided by athlete/MF)
- Translator if needed - the translator shall be used to provide instruction to the athlete directed by the classifiers. (provided by athlete/MF)
- The athlete's coach is also encouraged to attend this portion as an observer only. The coach may act as a translator only when another translator is not available.

PART FIVE: CONCLUSION OF CLASSIFICATION AND COMPLETION OF DOCUMENTATION

Once all Athlete Evaluation tests are complete, the classifiers will jointly determine the "Final Classification" and the recommended sport class and status will be noted on the classification form. The classification form shall be completed and signed by both classifiers. The athlete must also print and sign their name on the form. Both classifiers must agree on the sport class being issued. If after completion of all tests, there is disagreement, the athlete shall be issued the more functional sport class and given a Review status. Remember, if an athlete uses a prosthesis or orthosis, that athlete shall be assessed with and without the device. Both ways shall be documented, and the more functional sport class will be issued.

For an International Sport Class and Sport Class Status, an athlete needs to undergo the Athlete Evaluation as part of a World Rowing Classification event at a competition.

New

An "N" (New) status will be given if an athlete has not been evaluated by a World Rowing International Classification Panel, but who has been classified by 2 Trainee Classifiers (1 Medical and 1 Technical), or only 1 International Classifier is present, or when sufficient medical documentation is not provided. Athletes with a N Sport Class Status must undergo classification evaluation again at the next event before competing.

Confirmed

A "C" (Confirmed) sport class status is assigned to an athlete who has been evaluated by a World Rowing International Classification Panel and the International Classification Panel has determined that the athlete's Sport Class is unlikely to change. An athlete with a C Sport Class Status must undergo an Athlete Evaluation if a Protest is made by World Rowing, or in the event of a change in the relevant Rules or Regulations. If the athlete's medical status has changed, the athlete and the MF are responsible for requesting a re-classification by submitting the appropriate medical documentation explaining the change in the medical condition. This information shall be submitted to the World Rowing Classification Coordinator.

Review

An "R" (Review) status will be given if the Classification Panel believes that future Athlete Evaluation will be required before an athlete can be allocated the Sport Class Status Confirmed. This may be for a number of reasons, including but not limited to situations where the athlete:

- has a newly diagnosed verifiable permanent disability/impairment that may change with time.
- has only recently entered a competition in Para Rowing.
- has a fluctuating and/or progressive Impairment/ Impairments that is/are permanent but not stable.
- is a minor.

A Review date should be set by the Classification Panel and be sure to document the "Review By" date on the form. The MF is responsible for requesting a re-classification by submitting the appropriate medical documentation. This information shall be uploaded to the World Rowing Classification Portal no less than 45 days prior to the scheduled classification. For instructions, Federations can email classification@worldrowing.com

TEST INSTRUCTIONS FOR COORDINATION FOR ATHLETES WITH CENTRAL NERVOUS SYSTEM DISORDER ONLY

	Set up	Start position	End position
Finger flexion & extension	Sitting in chair or wheelchair, may be supported at trunk—must feel safe and secure during test	Full finger flexion with palms down	Full finger extension with palms down
Wrist flexion & extension	Sitting in chair or wheelchair, may be supported at trunk—must feel safe and secure during test	Full wrist flexion with palms down	Full wrist extension with palms down
Elbow flexion & extension	Sitting in chair or wheelchair, may be supported at trunk—must feel safe and secure during test	Full elbow extension with palms down, shoulders neutral	Full elbow flexion with palms down, shoulders neutral
Shoulder flexion & extension	Sitting in chair or wheelchair, may be supported at trunk—must feel safe and secure during test	Shoulders flexed to 120 ^o , elbows flexed	Full shoulder extension, elbows flexed
Knee flexion and & extension	Sitting on bench or table, may support self with upper extremities—must feel safe and secure during test	Knees at full flexion allowed by bench	Knees fully extended
Ankle dorsiflexion & plantarflexion	Sitting on bench or table, may support self with upper extremities—must feel safe and secure during test	Ankles at full plantarflexion	Ankles at full dorsiflexion
Hip flexion & extension	Seated on ergometer on sliding seat with feet strapped without holding the bar with the hands	Slide forward (hips and knees flexed) using only the legs varying between fast and slow pace	Slide backwards (extending the knees and hips) using only the legs varying between fast and slow pace

Scoring for coordination is as follows:

5 = Able to move from start to end positions fluidly and consistently, maintaining full ROM of this movement.

4 = Almost full ROM, with slight spasticity and slight increase in muscle tone and/ or slight coordination problems

3 = Moderate ROM, moderate spasticity, with tone restricting movement and/or moderate coordination problems

2 = Severely restricted ROM, severe spasticity-hypertonic muscle stiffness present and/or severe coordination problems

1 = Very severely restricted ROM due to severe hypertonic muscle stiffness and/or very minimally coordinated movements

0 = No functional movement at all

Consider symmetry left to right

CODE OF CONDUCT FOR INTERNATIONAL, NATIONAL, AND TRAINEE/MENTEE CLASSIFIERS

The Purpose of the Code of Conduct

To maintain the highest standards of conduct of classifiers in para rowing as impartial evaluators who determine an athlete's Sport Class and Sport Class Status. The integrity of classification in the Paralympic Movement is essential, and the professional conduct and behaviour of every Classifier is central to this.

Classifiers are required to follow the specific provisions as outlined in this Code of Conduct:

All classifiers must adhere to this Classifier Code of Conduct which includes:

- a. Respecting and valuing athletes, coaches and support personnel.
 - b. Respecting the World Rowing Classification Regulations and World Rowing Rules.
 - c. Respecting their colleagues.
 - d. Respecting the Classification decision-making process.
 - e. Understanding the consequences of non-compliance of the Classifier Code of Conduct.
1. Value and respect the athletes and coaches/teams by:
 - a. Showing appropriate awareness of an athlete's ability during the classification process and providing assistance only when explicitly asked to do so.
 - b. Respecting the athlete's privacy during and outside of the classification process and treating their information confidentially.
 - c. Maintaining a courteous, objective, impartial and honest attitude during and outside classification and competitions.
 - d. Involving the athlete in discussions in matters about their classification, technical issues, and explaining the results.
 - e. Enforcing the correct procedure for complaints and protests according to the guidelines in a fair, non-threatening, and non-arbitrary manner.
 - f. Not engaging in discussions with coaches, athletes, or any representatives of a Member Federation at or outside of an event with regard to any other athlete's classification.
 - g. Redirecting questions or concerns regarding classification to the Classification Coordinator or Chief Classifier (when at an event).
 - h. Maintain confidentiality of athlete information.
 2. Respect the World Rowing Rules and Classification Regulations by:
 - a. Accurately and honestly representing their qualifications and abilities when applying for classifier training and certification, and when accepting classification panel appointments at competitions.
 - b. Understanding the theory and practical aspects of the World Rowing Classification Regulations and keeping up to date with changes.
 - c. Continuously seeking self-improvement through the study of the Classification Regulations, peer feedback, and personal improvement plans (where relevant).
 - d. Performing classification duties without yielding to any economic, political, sporting or human pressure.
 - e. Following the clearly defined procedures for completing medical and technical classification as set forth by the World Rowing Classification Advisory Panel

- f. Making the classification procedures clear and transparent to the athlete and coaches/team managers.
 - g. Disclosing any relationship with a athlete or support staff and/or involvement in a prior classification that may constitute a conflict of interest.
3. Respect other Para Rowing Classifiers by:
- a. Treating all discussions with other classifiers as confidential information.
 - b. Collaborating with other Classifiers within the Classification Panel to make unified decisions. Explaining or justifying differences of opinion internally in a calm and measured way, without showing anger or resentment.
 - c. Treating other Classifiers with professional dignity and courtesy, recognising that it is inappropriate and unacceptable to criticize other Classifiers in public.
 - d. Respecting and upholding the classification process at all times.
4. Respect the decision-making process by:
- a. Treating discussions about an athlete's classification as confidential information and refraining from discussing the details of an individual athlete's classification with any person.
 - b. Publicly and privately respect and support decisions by other classifiers, technical advisors, or World Rowing officials.
 - c. Raising concerns and questions in a respectful and productive manner.
 - d. Allowing the Chief Classifier (at an event) or the CAP (at all other times) to be the spokesperson(s) for final decisions on protests related to classification.
 - e. Recognising that participants on International Classification Panels are acting for the sport of Rowing and the fairness of the classification process and not for any individual Member Federation.
5. Understand the consequences of non-compliance of the Classifier Code of Conduct by:
- a. Understanding that potential breaches of this Code of Conduct will be investigated by the CAP.

I, _____, declare that I understand this code of conduct

and I fully accept it.

Date:

Signature:

WORLD ROWING PARA ROWING CLASSIFICATION FORM

ATHLETE EVALUATION CONSENT FORM

1. I agree to undergo the Athlete Evaluation process detailed in the World Rowing Classification Regulations and administered by a designated World Rowing Classification Panel. I understand that this process may require me to participate in sport-like exercises and activities which may include me being observed whilst competing. I understand that there is a risk of injury in participating in exercises and activities. I confirm that I am healthy enough to participate in Athlete Evaluation.
2. I understand that I have to comply with the requests made by the Classification Panel. This includes providing sufficient documentation to allow a Classification Panel to determine whether I comply with the eligibility requirements for Para Rowing. I understand that if I fail to comply with any such request then the Athlete Evaluation may be suspended without a Sport Class being allocated to me.
3. I understand that the Athlete Evaluation requires me to give my best effort, and that any Intentional Misrepresentation of my skills, abilities and/ or the degree of my Impairment during the Athlete Evaluation may result in me facing disciplinary action (see IPC Intentional Misrepresentation Rules in the IPC Athlete Classification Code).
4. I understand that the Athlete Evaluation is a judgment process and I agree to abide by the judgment of the Classification Panel. If I do not agree with the decision of the Classification Panel, I agree to abide by the Protest process as defined in the Classification Regulations.
5. I agree to be videotaped and photographed during the Athlete Evaluation process and that this may include my activity on and off the field of play during the Competition.
6. I agree and consent to World Rowing processing my personal data in any format, including my full name, country, date of birth, sport, Sport Class, Sport Class Status and relevant medical information. I agree and consent to my name, country and Sport Class and Sport Class Status being published by World Rowing and shared with third parties such as Competition Organisers.

I wish I do not wish

to assist World Rowing in developing the Classification system and therefore allow my data collected during the Athlete Evaluation and the video material recorded during training and competition to be used for research and educational purposes by World Rowing. I understand that I may withdraw this consent at any time, and that any data held will be rendered anonymous and retained in a form in which identification of the individual is not disclosed.

Printed name of the athlete

Signature

Date

Parent / Guardian*

Signature

Date

**This is mandatory if the Athlete is under eighteen (18) years of age.*

Printed name of Witness

Signature

Date

WORLD ROWING PARA ROWING CLASSIFICATION FORM

For the most up to date form, please visit <https://worldrowing.com/technical/para-rowing-classification/>

