

ICF PADDLEABILITY CLASSIFIERS INSTRUCTION MANUAL

The purpose of this manual is to guide ICF Paddleability Classifiers in the completion of the classification process for all paddlers with physical disability.

This manual supports the *2009 ICF PaddleAbility Classification Guidelines*

ICF PADDLEABILITY CLASSIFIERS

An ICF Paddleability Classifier is one who has been approved as such by the ICF after undergoing the required training for the purpose. There are two types of ICF Classifier:

- (1) ICF Medical Classifier: a medical doctor, doctor of osteopathic medicine, or physiotherapist,
- (2) ICF Technical Classifier: a person with extensive practical knowledge of canoeing with experience such as a canoe/kayak coach, sport scientist, former paddler, physical educator or similarly qualified person.

For both types of ICF Classifier, experience with PaddleAbility is an advantage but not a requirement.

The Canoeing for ALL Committee of the ICF shall appoint one Head of Classification. The Head of Classification and The ICF Canoeing for ALL committee will appoint one Chief Classifier for each ICF event as needed.

All ICF Classifiers must adhere to the Classifiers Code of Conduct at all times. Please refer to Appendix 1 for the "Code of Conduct".

PROCESS FOR CLASSIFYING PADDLERS WITH A PHYSICAL DISABILITY

The standard ICF classification process is conducted by an ICF Classification Panel comprised of two ICF Classifiers, one of whom must be an ICF Medical Classifier and one an ICF Technical Classifier

The process involves three parts:

- (1) Medical Examination Benchmark Test – directed by an ICF Medical Classifier with an ICF Technical Classifier in attendance.
- (2) On Water Observation – directed by both an ICF Medical Classifier and an ICF Technical Classifier and conducted during training and/or competition. Observation should be completed while the paddler is aware of being observed and while not aware. This test is obligatory.
- (3) Ergometer Test – directed by an ICF Technical Classifier with ICF Medical Classifier in attendance.

PREREQUISITES FOR CLASSIFICATION

Paddlers seeking to be classified as an adaptive paddler must present to the Classification Panel:

- A completed *ICF PaddleAbility Classification Application Form*
- A completed *Consent for ICF PaddleAbility Paddler Classification Form*
- A completed *Declaration of Medical Conditions that may Require Emergency Measures Form*
- The *ICF PaddleAbility Athlete Certificate of Diagnosis* form signed by a Medical Physician confirming the physical disability, and the functional effect the disability has on the paddler. This must be in English.
- The paddler must present ready to be classified in a paddling outfit or at least ready to paddle.

PART ONE: MEDICAL EXAMINATION BENCHMARK TEST

To be completed by an ICF Medical Classifier, with an ICF Technical Classifier present

Materials Required

- Plinth or mat table
- Goniometer
- All forms related to PaddleAbility classification including medical documentation

Process

- Review required documentation (refer to above) to ensure proper completion.
- Interview paddler to ensure all diagnosis information is correct and detailed.
- A coach or support personnel are permitted to be present particularly if the candidate athlete is not fully conversant in the English language.

1. Assessment using Functional Classification Assessment Test

This test will help the classifier to determine whether the paddler meets the minimum requirements to complete as an adaptive paddler.

- This test is to be completed to the standards of manual muscle testing and normal range of motion as described in *Hoppenfeld, Stanley. Physical Examination of the Spine Extremities. New York, Appleton-Century-Crofts, 1976.*
- Classifiers will use a 0-5 scale as noted on the *Functional Classification Assessment Test Chart*, a copy of which is part of the application form (p. 9). The +/- scale will not be used for the purpose of this test.
- If a paddler has an amputation, a score of "0" is entered.
- Test Active Range of Motion first, and if there are limits, test Passive Range of Motion. If Passive Range of Motion is more than active, document the passive score in the box. You are looking for available range of motion, not only active. The strength test takes the active movement into consideration.
- In the seated position test the following
 - Shoulder flexion and extension strength and ROM
 - Elbow flexion and extension strength and ROM
 - Wrist flexion and extension and ROM
 - Finger flexion and extension strength and ROM
 - Knee extension strength and ROM
 - Ankle dorsiflexion strength and range of motion
 - Ankle plantar flexion range of motion
 - Hip flexion strength
- In the supine position test hip flexion range of motion.
- In the prone position test
 - Hip extension strength and ROM
 - Knee flexion strength and range of motion
 - Ankle plantar flexion and strength.
- Enter the scores in the appropriate box, and total them below where indicated.
- All joint motions and strengths must be tested and scores entered. Failure to do so will result in an incomplete and therefore non-valid classification of the paddler.
- A paddler who meets the minimum disability requirements for PaddleAbility (loss of 10 points in one limb, or 15 points across 2 limbs, a full loss of tree fingers in one hand, or a tarsel metatarsal amputation) will be classified as eligible for the LTA class, at a minimum, subject to satisfactory completion of the ergometer and (if needed), on-water assessment. Subject to additional testing, the paddler may also be eligible for TA and/or the A class.
- If any paddler does not meet the minimum disability, he/she will be deemed as Not Eligible to compete as an adaptive paddler, and the classification will end here.
- All findings must be documented on the *ICF PaddleAbility Classification Application Form for Physical Disabilities.*

2. 30 degree Squat Test (Not necessary for an 'A' candidate paddler)

The purpose of this test is to assess whether a paddler has reasonable functional strength of the leg muscles to exert force against the foot board or seat to propel the boat through the water.

- The paddler will stand without external assistance. If he/she uses a prosthesis or orthosis while paddling, it should be worn during this test.
- The paddler will perform a squat, with both or one leg as able, flexing the knee(s) to a 30 degree angle.
- The paddler will then return to a full standing position.
- Minimal balance assistance may be given for safety.
- If the paddler is able to complete this test, this is considered to be a pass, and his/her place as an LTA paddler is likely to be confirmed, subject to assessment on the ergometer and on-water observation.
- If the paddler is not able to complete this test, (including a paddler in a wheelchair or with significant leg weakness who cannot participate in the test at all) this is considered to be a fail, and he/she may be considered for the TA or A class. If a paddler fails the test, the reason for failing the test must be documented clearly.
- All findings must be documented on the *ICF PaddleAbility Classification Application Form*

3. Long Sit Test (Not necessary for an 'LTA' candidate paddler)

This test is used to assess whether the paddler has the ability to twist & lean forward on both sides and return to an upright position with enough strength to assist with boat movement through the water.

- If he/she uses a prosthesis or orthosis while paddling, it should be worn during this test.
- The paddler will sit on the plinth with legs as straight as possible.
- The paddler will twist and lean the trunk forward to approximately a 30-45 degree angle of the shoulders without using the arms for support
- He/she will hold the position for 3 seconds then return to the upright neutral position without using the arms. This should be repeated on the opposite side.
- The paddler will then lean backwards to approximately a 30 degree angle at the trunk without using the arms
- He/she will hold this position for 3 seconds and then return to upright neutral position without using the arms
- If the paddler is able to do the above tests, repeat while providing minimal resistance
- If the paddler is able to complete all of the above, it is considered to be a pass, and he/she will likely be at least in the TA class, subject to confirmation in the ergometer test and on-water observation.
- If the paddler is not able to complete any of the above, it is considered to be a fail, and he/she may be considered for the A class, subject to confirmation in the ergometer test and on-water observation. If the paddler fails the test, the reason for failing must be documented clearly on the form
- All findings must be documented on the *PaddleAbility Classification Application Form for Physical Disabilities*

PART TWO: ON-WATER OBSERVATION (obligatory)

ICF Medical and Technical Classifiers

The medical and technical classifiers will both observe the paddler while on the water, while training and/or racing.

Materials Needed

- Appropriate boat for paddler
- The adaptive equipment the paddler will use in competition. (supplied by the paddler)
- Video camera
- Safety motor boat and driver

Objectives

The purpose of on-water observation is to assess that the paddler has been placed in the appropriate boat class having regard to ICF's functional objectives for each class.

ICF Functional Objectives for each boat class

When assessing paddlers in the ergometer test and through on-water observation the classifier/s will have regard to the functional objectives for each of the LTA, TA and A sport classes as described in the ICF Classification Guidelines. These are as follows:

LTA

The LTA class is for paddlers with a disability who have the use of their legs, trunk, & arms and who can apply force to the foot board and seat to propel the boat.

TA

The TA class is for paddlers who have trunk movement and who are unable to apply continuous and controlled force to the footboard or seat to propel the boat because of significantly weakened function of the lower limbs.

A

The A class is for paddlers who have no or minimal trunk function. An A class paddler is able to apply force predominantly using the arms and/or shoulders.

Process

On-water assessment should be undertaken with consideration given to the water conditions and safety. The paddler shall paddle a minimum of 200 metres away from the dock, turn, and 200 metres back to the dock. The paddler may be asked to repeat.

The Classifiers may request the paddler being classified to undertake a range of movements or tests and shall also observe the paddler during normal training and racing. The Classifiers shall satisfy themselves as to the correct classification of the paddler concerned. The paddler can also be observed at any moment while representing his/her paddling ability. They shall observe the paddler while he/she is aware of being observed, and while he/she is not aware of being observed. If the paddler uses a prosthesis or orthosis while paddling, it should be worn during this test.

Detailed documentation of the classifiers' findings is paramount to accurate classification and should be as complete as possible. The ICF Technical Classifier should record a clear statement on the application form of the paddler's functional ability as observed during the On-Water test, having regard to the ICF functional objectives for each sport class as recorded above. A photograph of the athlete which illustrates the equipment used for the test should be part of the documentation. A video of the test is also suggested to be part of the documentation.

PART THREE: ERGOMETER TEST

To be completed by an ICF Technical Classifier with an ICF Medical Classifier present

Materials Required

- Ergometer with fixed seat
- Appropriate cushion to prevent tissue breakdown
- Any other necessary equipment for the individual paddler

The role of the ICF Technical Classifier is to assess the paddling motion when conducted on an ergometer. Such tests should be able to confirm or refute the bench test classification for the LTA, TA or A Category.

Process

- The paddler's sitting balance should be assessed as part of the functional assessment on the ergometer. If the paddler presents with even fair trunk function/sitting balance and leg function then the assessment should be carried out on a standard seat. If the paddler's sitting balance is compromised, a postural support seat similar or identical to the support (seat) to be used in the boat should be used.
- If the paddler uses a prosthesis or orthosis while paddling, it should be worn during this test
- The classifier should begin to assess the paddler paddling with the least amount of assistance possible. The medical classifier should be guarding the paddler to prevent falls
- The paddler will be asked to take enough strokes to represent his/her paddling ability, for example: one minute duration. Classifiers may request more detailed procedures, i.e. distance paddled over a certain time, average power, etc. Such tests should be able to support, or otherwise, the paddler's classification for the LTA, TA or A sport class having regard to the functional criteria.
- Assessing paddlers with central nervous system impairments on the ergometer should begin at low stroke rates and be continued to higher stroke rates similar to that of race rates. Paddlers with central nervous system impairments may demonstrate a somewhat fluid, or normal looking stroke performance at low stroke rates; however they may not be able to maintain this at higher stroke rates, resulting in decreased coordination of stroke mechanics. Conversely, paddlers who demonstrate predominately mild tone impairments and/or athetosis (a symptom of a central nervous system disorder that presents wormlike movements of the arms and/or legs) may perform the cyclical nature of the paddling stroke with more fluidity than anticipated. Ergometer assessment should continue for sufficient time and at high rates to ensure the classifiers have reviewed typical performance of the paddler as would be anticipated during the body of a race. With classifications that pose difficulties, in particular with paddlers new to paddling, review status may be appropriate to allow reclassification following training and/or increased fitness.

ICF PaddleAbility Classification Manual

FINAL

June 2009

- Observe paddler from the side, rear, and front for linear motion on ergometer. Check if the paddler is able to achieve good force against the foot board. Allow the paddler to paddle with a full paddling stroke motion for a minimum of 1 minute to assess paddler's ability to maintain power and force against the foot board.
- Observe the paddler to see if decreased coordination occurs during the paddling stroke at higher rates with a change in power output.
- Observation during LTA ergometer assessment for paddlers with a central nervous system disorder
 - Classifiers should watch carefully for difficulty in one or both legs in alternating between full flexion (at the catch) and full extension (at the finish of the stroke). This difficulty may be further demonstrated at higher stroke rates as in race rates (>100 spm) due to resulting increased muscle tone, that causes the person to move with spastic, jerky movements, 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 body 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, body swing and arm pull resulting in decreased fluidity and inability to paddle at higher stroke rates may also be noted with or without the ability to accomplish the above positions would direct classifiers to assess the paddler as a TA paddler.
- Observation during TA ergometer assessment
 - During the assessment of the TA technique, the paddlers' body-swing mechanics may demonstrate an inability to maintain body-swing resulting in decreased length of stroke possibly further seen while paddling at higher stroke rates. Poor dynamic trunk control may also be demonstrated by an inability to maintain trunk counter-twist movement as arm pull is initiated. Paddlers with impaired trunk control may also demonstrate increased use of head movement to create body-swing movement. With very limited contribution of the trunk to the drive this paddler would be more appropriate as A.
- Observation during an A ergometer assessment
 - The paddler may be unable to maintain the seated position without postural support. He/she may need an "assistive device" to prevent his/her trunk from falling forwards during the forwards stroke due to the resistance from the ergo. The paddler may be able to maintain the seated position, but spacticity, or reduced ranges of movement, may affect posture and balance to such an extent that any forward flexion is used to maintain the upright posture. The paddler will not be able to produce any rotation of the trunk, and this will result in a decreased stroke length. Essentially, the trunk will be fixed, and will provide a rigid platform to enable the paddler to make best use of the muscle power in the upper limbs.
- Detailed documentation of the classifiers' findings is paramount to accurate classification and should be as complete as possible. The ICF Technical Classifier should record a clear statement on the application form of the paddler's functional ability as observed through the ergometer test, having regard to the ICF functional objectives for each sport class as recorded above. A photograph of the athlete which illustrates the equipment used for the test should be part of the documentation. A video of the test is also suggested to be part of the documentation.

PART 4: CONCLUSION OF CLASSIFICATION AND COMPLETION OF DOCUMENTATION

Once confirmed with all necessary above tests, the classifiers will jointly determine the "Final Classification" and the recommended sport class and status will be noted on the application form. The application form shall be completed and signed by both classifiers. The classifiers must also print their name legibly. The paddler must be informed verbally within two hours of the determination of the sport class and sport class status. The paddler must also print and sign his/her name on the form. Both classifiers must agree on the sport class. If after completion of all tests, there is a disagreement, the paddler shall be issued the more functional sport class, and given review status.

A "C" (Confirmed) status will be given if the paddler is classified by an ICF International Classification Panel and the paddler's status is not likely to change.

An "N" (New) status will be given if the paddler is not classified by an ICF International Classification Panel.

An "R" (Review) status will be given if the paddler is classified by an ICF International Classification Panel and the paddler wears a prosthetic or orthotic device that may affect the paddling ability, or they have a progressive disability that may improve.

Once complete, all forms are to be forwarded to the ICF Canoeing for ALL Committee Chair addressed as follows:

PaddleAbility Classification
ICF Canoeing for ALL Committee
c/o John Edwards
Chair, Canoeing for All Committee
jhedwards@canoekayak.ca
1 613 260-5137 (fax)

If the paddler plans only to compete in a local or National Competition, the forms should not be forwarded to ICF.

Copies of all forms should be forwarded to the national federation of the paddlers concerned.

NOTE: All forms contain confidential information. Consequently, they are only to be used for the purposes of classification of the athlete. Use of the forms for any other purpose is strictly forbidden.

CONSENT FOR ICF PADDLEABILITY CLASSIFICATION

Explanation:

All paddlers must be classified under the ICF Classification guidelines in order to be eligible to compete in ICF PaddleAbility events,.

Failure to cooperate with the Classifiers or failure to complete the classification procedure will lead to ineligibility to compete in the ICF event.

The Classification process will be conducted with all due care to limit any discomfort to individual paddlers. However, failure to complete the classification process, regardless of discomfort, will result in the paddler not being classified and therefore not being eligible to compete in ICF events. The paddler may withdraw their consent at any time but the process will then not be undertaken and the paddler will not be classified and will also not be eligible to compete in ICF PaddleAbility events.

By signing this consent form, the paddler agrees to waive his/her rights to make any claim against the Classifiers, ICF, or anyone who might then claim against the Classifiers or the ICF for indemnification for any damages or claims of personal injury or any other claim arising from or in any way related to the classification procedure of the paddler. The paddler agrees to fully indemnify ICF and the Classifiers should any claim be made against them in any way related to the classification of the paddler.

The following is an agreement by the paddler, and the paddler's parent/legal guardian where appropriate; consenting that the paddler agrees to fully participate in the ICF PaddleAbility eligibility criteria and classification procedure.

The ICF will strictly restrict the use of the information collected for the administration of PaddleAbility classification.

By signing below, the paddler agrees to complete the test honestly to the best of his/her ability.

I, _____ of (Federation) _____

Consent to be classified under the ICF PaddleAbility eligibility criteria and classification procedure for ICF events

I, _____ parent/legal guardian of (name of paddler) _____

_____ consent to the above on behalf of _____.

Signature of Paddler: _____ Date: _____

Signature of Guardian: _____ Date: _____

(Note: Confirmation of guardianship status may be required)

Signature of Witness: _____ Date: _____

Print witness name and address: _____

DECLARATION OF MEDICAL CONDITIONS THAT MAY REQUIRE EMERGENCY MEASURES

(Please print all information and complete in English)

Name: _____ National Federation: _____

I, _____, wish to compete in ICF PaddleAbility events.
(PLEASE PRINT FULL NAME)

I understand that ICF requires me to state any known medical conditions that may compromise my safety on the water. I understand that I must state the current management for my condition(s).

(Please print N/A if there are no associated medical conditions)

PERTINENT MEDICAL HISTORY:

- Diabetes Heart Disease Cancer Stroke Recent Fracture Asthma Hypertension (high blood pressure)
- Autonomic Disreflexia Dehydration Seizures Communication Disorder Other _____

Possible Medical Complications: _____

Steps that must be taken should this arise: _____

Allergies: _____

All medication is as follows: _____

I understand if I fail to state any known medical conditions and if the condition results in having to perform a rescue, I will automatically be deemed ineligible for the present competition. I also understand that if a condition becomes evident for the first time during competition and is diagnosed at the time, e.g. dehydration, I will still be eligible to compete as long as I observe the recommended management for the condition.

SIGNATURE OF PADDLER: _____

SIGNATURE OF PARENT/GUARDIAN/WARD [UNDER AGE 18]: _____

SIGNATURE OF WITNESS: _____

PRINTED NAME OF WITNESS: _____

DATE: _____

ICF PADDLEABILITY CLASSIFICATION APPLICATION FORM

Please complete in English

Family Name: _____ Given Name _____

Sex: _____ Date of Birth (dd/mm/yyyy): _____

Address: _____

Passport Number: _____ Expiry Date: _____ Federation _____

Please attach the following documentation as appropriate to the application:

1. ICF PaddleAbility Athlete Certificate of Diagnosis signed by a medical doctor. The form is to be filled out in English.

For Classifier's Use Only

Diagnosis+ Associated Diagnosis+ other Comments:

Physical Disability:

Amputee _____ since _____

Spinal Level Impaired _____ Complete/Incomplete since _____

Others _____

Documentation of Disability Attached

Progressive: Yes/No

Seizures: Yes/No

Asthma: Yes/No

Ability to Walk: Yes/No

Crutches/Aids: Yes/No

Wheelchair: Yes/No

Testing Place and Date: _____

Recommended Class: LTA _ TA _ _ A _

Classifier/s Comment: _____

Final Classification: **New** **Review** **Confirmed**

If R (Review) Status, provide reasons: _____

Signature, ICF Classifier (Medical) Signature, ICF Classifier (Technical) Signature, Paddler

Print Name *Print Name* *Print Name*

Time Paddler was informed of Classification: _____

ICF PADDLEABILITY FUNCTIONAL CLASSIFICATION TEST CHART

Paddler Name: _____ Federation: _____

Functional Classification Test	Muscle Strength (0-5 scale, no +/- scale)		Range of Movement (0-5 scale)	
	Right	Left	Right	Left
UPPER LIMBS				
Shoulder				
Flexion				
Extension				
Abduction				
Elbow				
Flexion				
Extension				
Wrist				
Flexion				
Extension				
Fingers				
Flexion				
Extension				
TOTAL UPPER: R (80) L (80)				
LOWER LIMBS				
Hips				
Flexion				
Extension				
Knee				
Flexion				
Extension				
Ankle				
Flexion (Plantarflexion)				
Extension (Dorsiflexion)				
TOTAL LOWER: R (60) L (60)				

Scales for Muscular strength

0 No muscle contraction

1 Flicker or trace of contraction

2 Active movement with gravity eliminated

3 Active movement against gravity through the full range of movement

4 Active movement against gravity and resistance through the full range of movement

5 Normal power through the full range of movement

Scales of Functional Range of Movement

0 No functional range of movement

1 Slight functional range of movement

2 25% functional range of movement

3 50% functional range of movement

4 75% functional range of movement

5 Normal functional range of movement

Minimal Disability:

(Refer to ICF PaddleAbility Functional Classification Test Chart)

Yes/No (Please circle): Minimal loss of 10 points on one limb or 15 points across two limbs in the above functional classification test chart.

Yes/No (Please circle): Full loss if three fingers on one hand.

Yes/No (Please circle): Transmetatarsal amputation of one foot.

ICF PaddleAbility Classification Manual

FINAL

June 2009

ICF PADDLEABILITY FUNCTIONAL CLASSIFICATION TEST
(continued)

Paddler Name _____ **Federation** _____

SQUAT TEST

30 DEGREE Squat Test: *Pass/Fail*

Comments:

LONG SIT TEST

Sitting Test: *Pass/Fail*

Comments:

ON-WATER OBSERVATION and ERGOMETER TEST

Comments on ergometer test and on-water observation:

(Note: Comments should provide an indication of whether these tests confirm the bench test results and why, and if not, the reason the ergometer test and/or on-water observation leads the classifiers to confirm a different category).

APPENDIX 1
CODE OF CONDUCT
AUTHORIZED INTERNATIONAL, NATIONAL, AND TRAINEE CLASSIFIERS

1. Respect the paddlers and coaches/teams by:
 - i) Showing appropriate awareness of a paddler's ability during the classification process and offering assistance only when explicitly asked to do so
 - ii) Respecting the paddler's privacy during the classification process and treating their information confidentially
 - iii) Maintaining a courteous attitude during the classification process and officiating if the competition
 - iv) Involving the paddler in discussions in matters pertaining to their own classification, technical issues, and explaining the results
 - v) Handling protests according to the procedures in a fair, non-threatening, and non-arbitrary manner.

2. Respect the rules by:
 - i) Precisely following the clearly defined procedures for completing medical and technical classification as set forth by the ICF Canoeing for ALL Committee
 - ii) Making the procedures clear and transparent to the paddler and coaches/team managers
 - iii) Disclosing any relationship with a paddler or involvement in a prior classification that may constitute a conflict of interest.

3. Respect the decision making process by:
 - i) Treating discussions about a paddler's classification as confidential information and refraining from discussing the details of individual paddler's classification with any person or national federation.
 - ii) Not criticizing decisions by other classifiers, technical advisors, or ICF officials.
 - iii) Allowing the ICF Chief Classifier to be the spokesperson for final decisions
 - iv) Recognizing that participants on International Classification Panels are acting for the sport of Canoeing and the fairness of the classification process not for any individual national federation.