

# SHOOTING PARA SPORT

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# WHO ARE WE?

## CATHERINE TREMBLAY



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# WHAT IS SHOOTING PARA SPORT?



# HISTORY

New York 1984 Paralympic Games

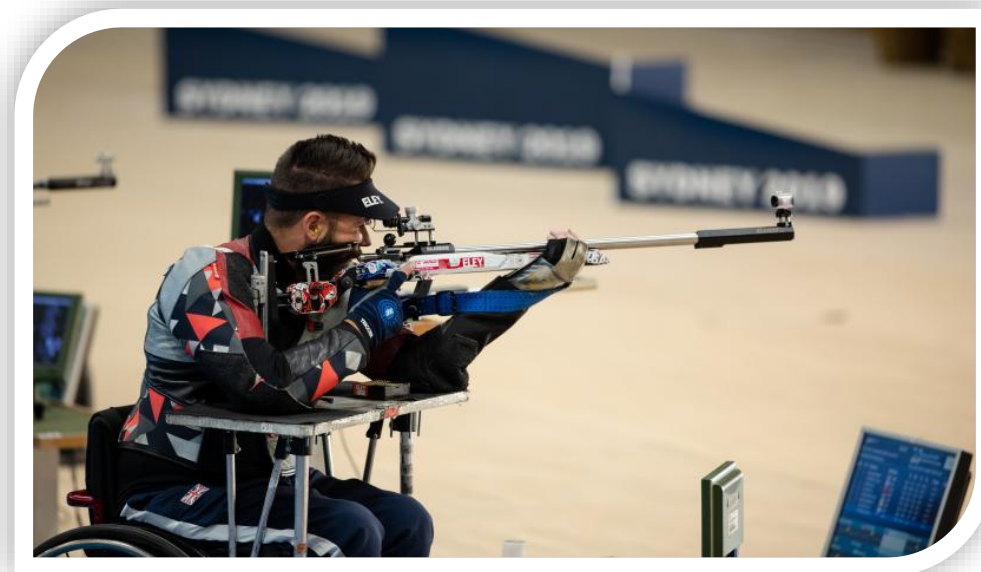
Barcelona 1992 Paralympic Games

Linz in Austria

London 2012 Paralympic Games

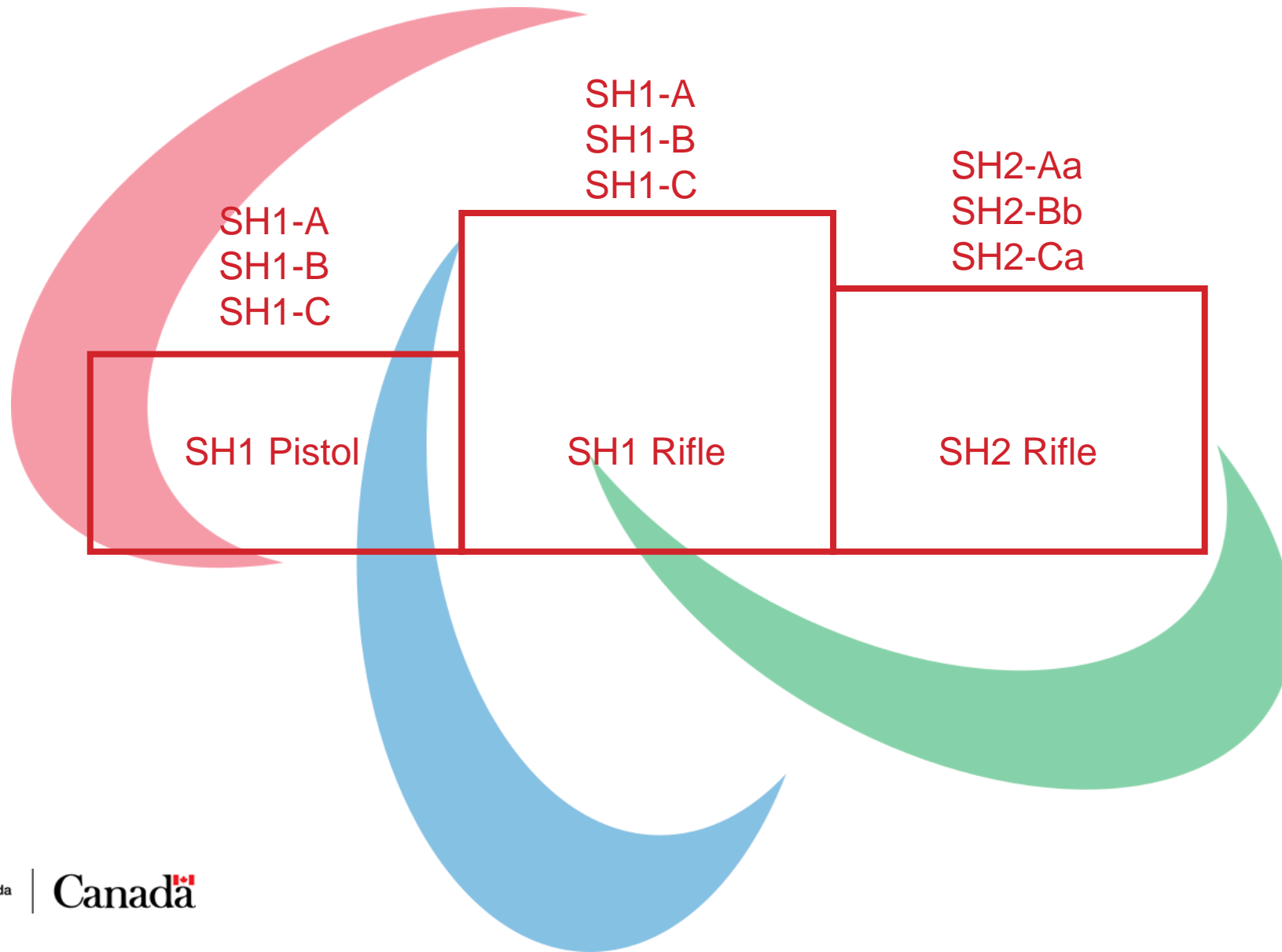
IPC Shooting World Championships in Suhl,  
Germany

IPC World Championships in Lonato del Garda,  
Italy



British shooter Matt Skelhon.

# PARALYMPIC EVENTS



# WORLD CHAMPIONSHIP EVENTS



SG-S  
Trap



SG-L  
Trap



SG-U  
Trap



SH3 Rifle

# EQUIPMENT

- **Rifles and Pistols**

- A .22 calibre rifle and air gun with compressed gas are used by athletes.

- **Ammunition**

- .177 (4.5mm diameter) pellets are used for 10m Air Rifle and Pistol events, whereas .22 (5.6mm diameter) bullets are used for 25m Pistol events, and 50m Pistol and Rifle events.

- **Target**

- Electronic targets are used in competition. The target varies in size depending on the event.

- **10m Air Rifle Event**

- The central ring measures half a millimetre across on a 4.5cm diameter target.

- **Change in Scoring**

- The qualification system for most rifle events changed to one decimal point. The top score for a shot is now 10.9.

# ADAPTED EQUIPMENT

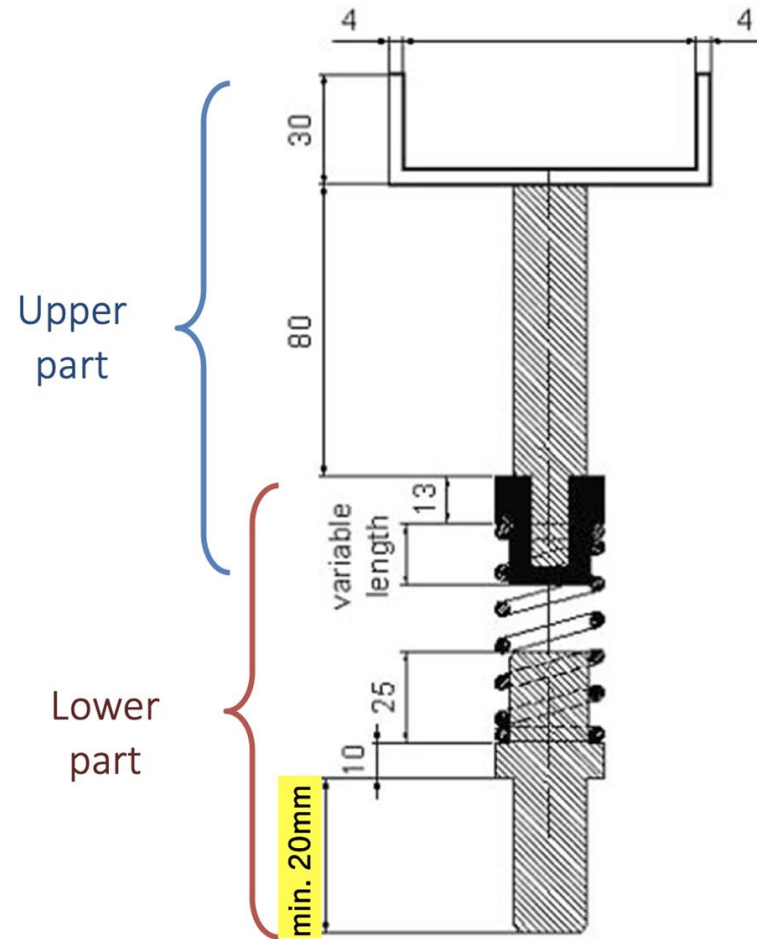
South Korea's Jiseok Lee

- Shooting Table
- Shooting Jacket
- Shooting Chair
- Rifle Stand with Spring Tension

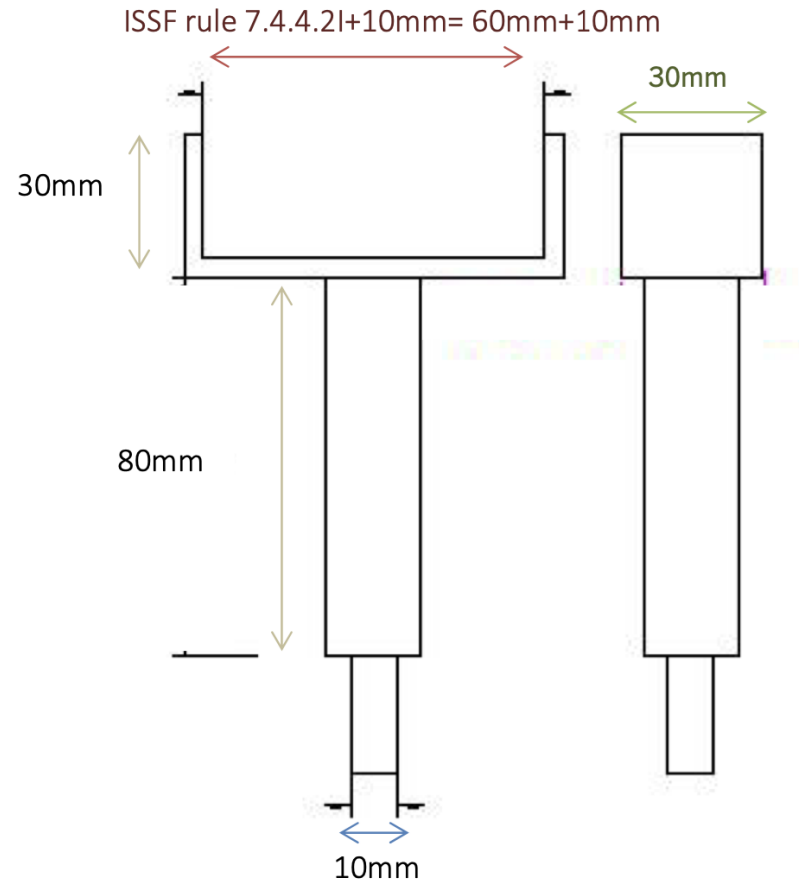




# SH2 SUPPORT STAND



# UPPER PART SUPPORT (U FORM SHAFT)



Max. weight: 200 grams

Source:

[https://www.paralympic.org/sites/default/files/document/190619132237473\\_World+Shooting+Para+Sport\\_Appendices\\_v2.pdf](https://www.paralympic.org/sites/default/files/document/190619132237473_World+Shooting+Para+Sport_Appendices_v2.pdf)

# ELIGIBILITY AND CLASSIFICATION

- To be eligible for WSPS an athlete must have an underlying medical diagnosis (Health Condition) that results in a Permanent and Eligible Impairment (article 7 in the WSPS Classification Rules and Regulations<sup>25</sup>).
- A classification system has been put into place to ensure the success of all athletes and minimize the impact of impairments on sport performance. Athletes are placed into sport-specific “sport classes” where athletes are grouped by the degree of activity limitation from the impairment. This ensures fair and equal competition, especially as the impact of impairment on each sport differs. Finals are conducted the way Olympic events are conducted.

# ELIGIBILITY AND CLASSIFICATION

- Classification Process
  - Why Classification?
    - define who is eligible to compete in Para sport and consequently who has the opportunity to reach the goal of becoming a Paralympic Athlete; and group Athletes into Sport Classes which aim to ensure that the impact of Impairment is minimised and sporting excellence determines which Athlete or team is ultimately victorious.
  - Classification Personnel
  - Athlete Evaluation
    - Medical Diagnosis Form

# WHO IS ELIGIBLE?

## ELIGIBLE IMPAIRMENTS:

Impaired muscle power	✓	Involuntary movements	✓
Impaired passive range of movement	✓	Muscle tension	✓
Limb deficiency	✓	Uncoordinated movements	✓
Leg length difference		Short stature	
Intellectual impairment		Vision Impairment	✓*
(*) : not a Paralympic discipline			

# ELIGIBILITY AND CLASSIFICATION

- Eligible Impairments with Lower Limb Impairments for Rifle & Pistol Shooting

Impairment of the Lower Limbs			
To meet the Minimum Impairment Criteria, an Athlete must meet at least one of the below criteria 1.a-1.d:			
Section	Impairment Type	Example of Conditions	Minimum Impairment Criteria
1.a	Limb Deficiency	Amputation from trauma, illness or cancer, limb deficiency from birth	Amputation through the ankle (symes amputation); <u>or</u> Dysmelia resulting in the absence of a full ankle joint.
1.b	Impaired Muscle Power	Spinal cord injury, Spina Bifida, Transverse Myelitis, Sacral Agenesis, Spinal Tumours, Cerebral Palsy, Muscular dystrophy	Decrease of muscle strength of at least 20 points in one lower limb or at least 25 points in both lower limbs across ankle plantar- and dorsiflexion, inversion and eversion, knee flexion and extension, hip flexion and extension and hip adduction and abduction (max. 100 points in both lower limbs).
1.c	Impaired Passive Range of Motion	Arthrogryposis, Talipes Equinovarus, joint fusions or contractures from chronic immobilisation or trauma.	Complete Ankylosis in one ankle joint; or Impaired range of movement that results in a functional deficit in the lower limbs comparable to loss of muscle strength described in criterion 1.b above.
1.d	Hypertonia, Ataxia, Athetosis	Cerebral palsy, acquired brain injury, stroke, brain tumor, Multiple sclerosis, cerebellar ataxia, Hereditary Spastic Paraparesis or other conditions where hypertonia (spasticity, rigidity or dystonia), ataxia or athetosis are present.	Lack of coordination resulting in a functional deficit in the lower limbs restricting joint movement.

# ELIGIBILITY AND CLASSIFICATION

- Eligible Impairments with Upper Limb Impairments for Rifle Shooting

Impairment of the Upper Limbs		
To meet the Minimum Impairment Criteria, an Athlete must meet at least one of the below criteria 2.a-2.d:		
Section	Impairment Type	Minimum Impairment Criteria
2.a	Limb Deficiency	Amputation through the wrist resulting in a non- functional wrist joint in one arm; or Dysmelia resulting in the absence of a full wrist joint in one arm.
2.b	Impaired Muscle Power	30 points decrease of muscular strength in one upper limb or 50 points decrease of muscular strength in both upper limbs across thumb opposition and extension, finger flexion and extension, wrist volar- and dorsiflexion, elbow flexion, extension, pronation and supination, shoulder flexion, extension, adduction, abduction, horizontal adduction, endo- and exorotation (max. 170 points in both upper limbs).
2.c	Impaired Passive Range of Motion	Impaired range of movement that results in a functional deficit in the upper limbs comparable to loss of muscle strength described in criterion 2.b above.  Note: Ankylosis of the wrist joints alone does not suffice to meet the Minimum Impairment Criteria for World Shooting Para Sport.
2.d	Hypertonia, Ataxia, Athetosis	Lack of coordination that results in a functional deficit in the upper limbs comparable to the loss of muscle strength described in criterion 2.b above.

# ELIGIBILITY AND CLASSIFICATION

- Eligible Impairments with Upper Limb Impairments for Pistol Shooting

Impairment of the Upper Limbs		
To meet the Minimum Impairment Criteria, an Athlete must meet at least one of the below criteria 3.a-3.d:		
Section	Impairment Type	Minimum Impairment Criteria
3.a	Limb Deficiency	Amputation through the wrist resulting in a non- functional wrist joint in one arm; or Dysmelia resulting in the absence of a full wrist joint in one arm.
3.b	Impaired Muscle Power	30 points decrease of muscular strength in one upper limb across wrist volar- and dorsiflexion, elbow flexion, extension, pronation and supination, shoulder flexion and extension, adduction and abduction, horizontal flexion, endo- and exorotations (total of max. 85 points in one upper limb).
3.c	Impaired Passive Range of Motion	Impaired range of movement that results in a functional deficit in the upper limbs comparable to loss of muscle strength described in criterion 3.b above.  Note: Ankylosis of the wrist joints alone does not suffice to meet the Minimum Impairment Criteria for World Shooting Para Sport.
3.d	Hypertonia, Ataxia, Athetosis	Lack of coordination that results in a functional deficit in the upper limbs comparable to the loss of muscle strength described in criterion 3.b above



# VISION IMPAIRMENT

Eligible impairments and Minimum Impairment Criteria in Rifle shooting for athletes with a VI.<sup>25</sup>

Eligible Impairment	Examples of Health Conditions	Minimum Impairment Criteria	
<b>Athletes with Vision Impairment have reduced or no vision caused by damage to the eye structure, optical nerves or optical pathways, or visual cortex of the brain.</b>	Examples of an Underlying Health Condition that can lead to Vision Impairment include retinitis pigmentosa and diabetic retinopathy.	Vision is impacted by either an: <ul style="list-style-type: none"> <li>• impairment of the eye structure;</li> <li>• impairment of the optic nerve or pathways;</li> <li>• impairment of the visual cortex of the brain.</li> </ul>	
		Visual Acuity	Athletes with a visual acuity poorer than or equal to logMAR 1.1 (20/200) <u>or</u> ;
		Visual Acuity and Contrast Sensitivity	Athletes with a visual acuity between 0.6 (20/120) and 1.0 logMAR (inclusive) <u>and</u> with a contrast sensitivity poorer than or equal to 1.4 logCS

# SH1-A Pistol

Russian shooter Sergey Malyshev in 2012.



# SH1-B Pistol

Zivko Papaz, Serbia, 2012



# SH1-A RIFLE

Andrii Doroshenko, Ukraine, 2019



# SH1-B RIFLE



# SH2-B RIFLE



# SH2-C RIFLE



# SG-S TRAP





# SG-L TRAP





2021-05-13

VIDEO SOURCE:  
<https://www.youtube.com/watch?v=WNvfdIzIRf8>

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# RULES



**International Shooting Sport Federation  
Internationaler Schiess-Sportverband e.V.  
Fédération Internationale de Tir Sportif  
Federación Internacional de Tiro Deportivo**



# FUN FACTS

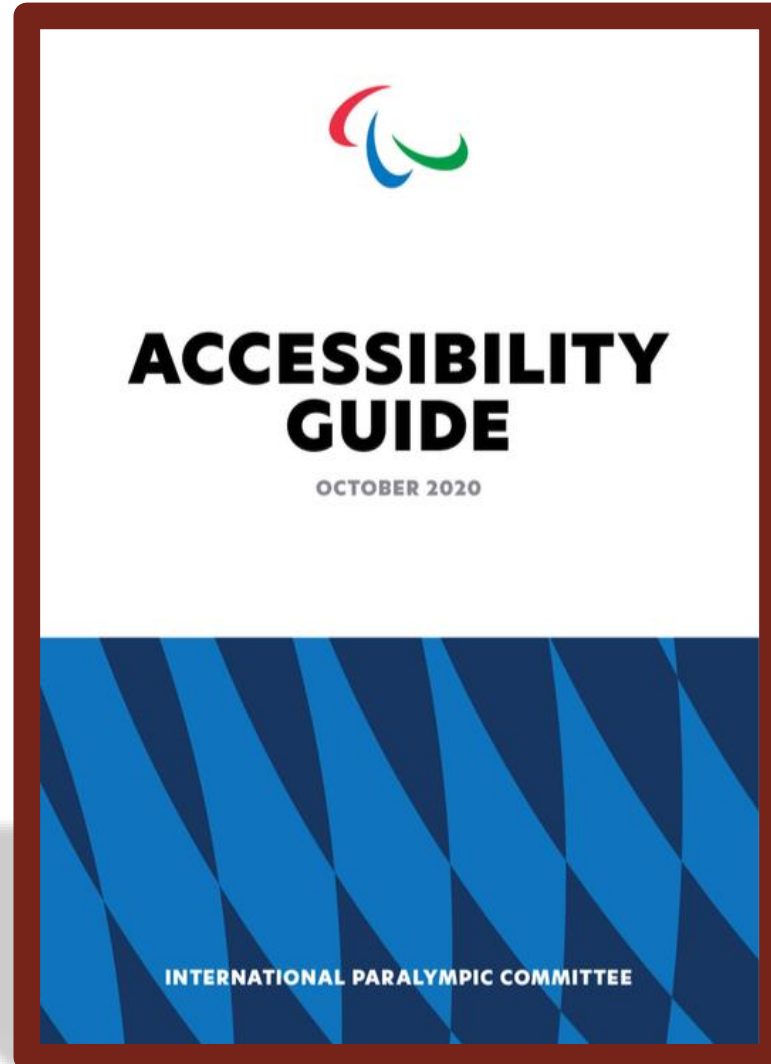
- One of the events unique to Paralympic competition is Air Rifle Prone. Though athletes will not lay on the ground in the traditional prone position, they are able to rest their elbows on a shooting table while shooting.
- Paralympic Three-Position Rifle events are contested with one elbow supported for the kneeling position, and two elbows supported for the prone position.
- VI shooting officially joined World Shooting Para Sport in 2019. Both VI and Para trap were added to the World Championships programme for the first time last year in Sydney, Australia where it was the second World Championships for Para trap.
- In VI shooting, athletes use an audio signal to guide them in their aiming, with the audio signal rising in pitch as the point of aim moves nearer to the centre of the target.



# VI SHOOTING



# INFRASTRUCTURE CONSIDERATIONS



# INFRASTRUCTURE CONSIDERATIONS

## SHOOTING CENTER – CHÂTEAUROUX – DEOLS



# RECRUITMENT

- Try-it Day
- Local community organizations tailored specifically for individuals with disabilities
- An example of an organization is WarAmps or Wounded Warriors
- Be creative and open to who comes to try the sport.
  - Many are looking for a place for social engagement as well as athletic endeavors



# BENEFITS OF SHOOTING PARA SPORT?



# FUTURE DIRECTIONS

- World Shooting Para Sport proposes changes aiming at Los Angeles 2028
- The changes are to add new disciplines for vision impaired (VI) shooting and shotgun (Para trap) to the programme while slightly altering the existing rifle events.
- While there will be fewer medals available in the new program for these Para athletes, the total number of events and medal opportunities for SH1 Rifle will not change.
- “The key change here is that these medal events will become more competitive with the increased number of competitors in each event,” Tyler Anderson, World Shooting Para Sport Senior Manager said.
- “VI shooting gives us an exciting opportunity to expand how we showcase our sport to the world and allows us to grow our sport by welcoming a new athlete population. Shotgun is very much a part of our shooting sport family and allows us to reach new stakeholders and grow our sport together.”

# ACKNOWLEDGEMENTS

- Tyler Anderson, World Shooting Para Sport Senior Manager
- Bernie Harrison, Treasurer, from the Calgary Rifle and Pistol Club
- Trysten Curran-Routledge at the Calgary Firearms Centre
- Dr. Sandra Honour- President, SFC
- For a list of references, please consult the Shooting Federation Canada Report on Athletes with A Disability in Shooting Para Sport document.