

FIELD & 3D TIPS | FITNESS | EXPERTS | HISTORY

BOW

INTERNATIONAL



INTERVIEW SPECIAL

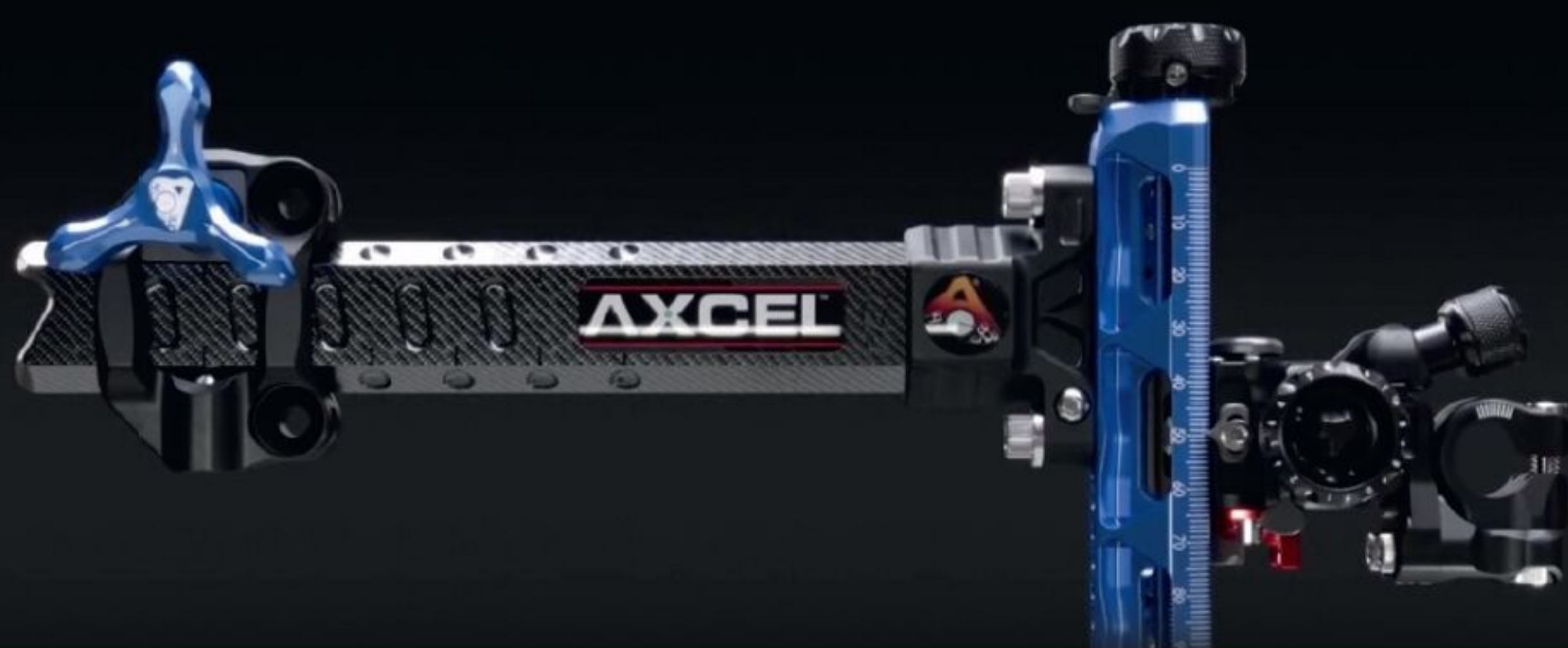
LEGENDARY COACH KIM

+
COLD
WEATHER
TIPS



NEW!

ACHIEVE XP PRO



NEW!

E1 CARBON CLICKER



GOLD TIP ARROW RANGE | NS-G VS NS-XP WIAWIS LIMB REVIEW | + MORE

THE NEW
TOP OF THE PODIUM.



Everything put into the TITLE is aimed at making it the most stable, most repeatable, and most accurate competition bow ever to stand on the target line.

Available in 36" and 38" ATA.



Learn more at mathewsinc.com



INVINSO V2

The Invinso V2 is Kinetic's flagship in the high-mid segment.

MATERIAL

Full CNC
6061-T651 aluminum

25" & 27"

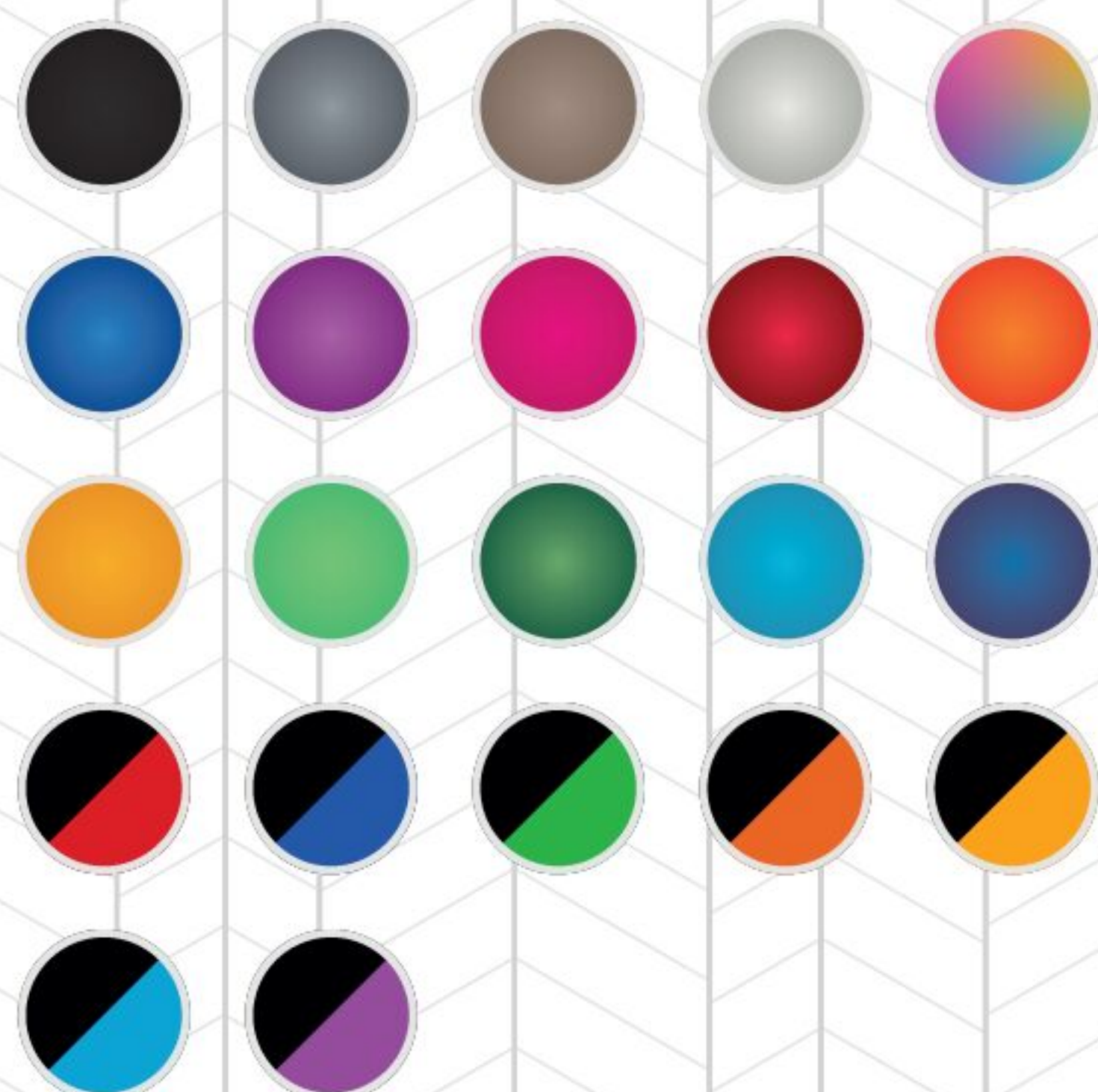
LENGTH:
25"

LENGTH:
27"

WEIGHT:
1280G

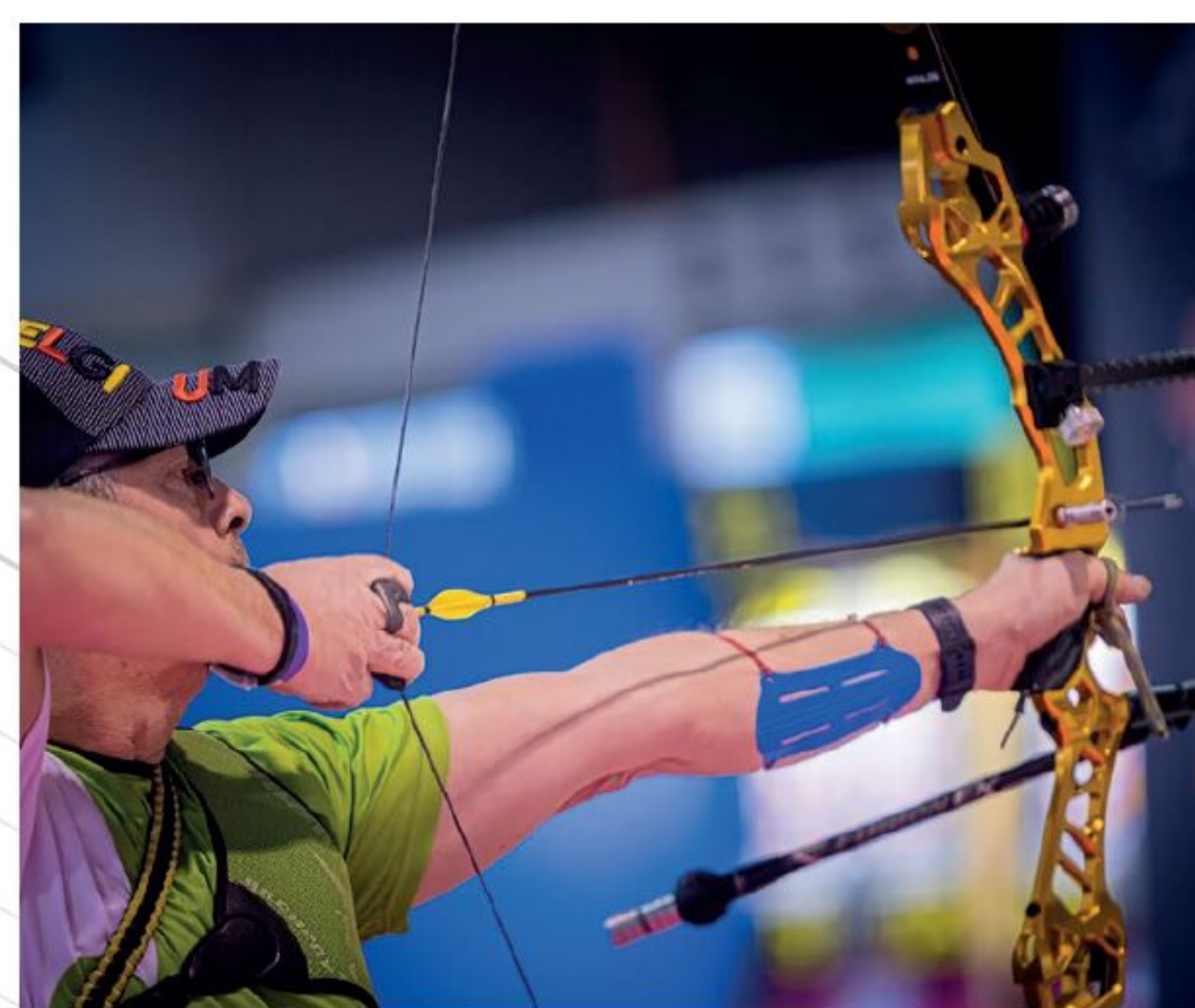
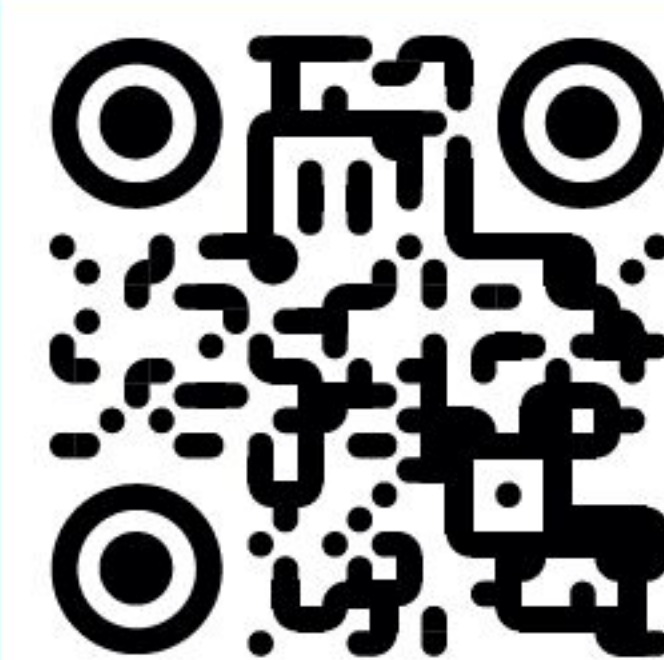
WEIGHT:
1330G

COLORS



ANODIZED DUOTONE BLACK / TURQUOISE

More info?



DISTRIBUTED BY:

SSA ARCHERY

WWW.SSA-ARCHERY.COM

INFO@SSA-ARCHERY.COM

#DesignDrivenValue

CONTENTS

BOW INTERNATIONAL

Bow International, ISSN 1748-9040, is published monthly with no issue in March, June or October by International Media, 85 Great Portland St, London, W1W 7LT - Tel: 0207 101 25 25

Publisher
Publisher: Wes Stanton
wes.stanton@international-media.com

Editorial
Editor: Kristina Dolgilevica
editor@bow-international.com
Art Editor: Mark Grafton
design@international-media.com

Contributors
Kristina Dolgilevica, Duncan Busby, Mimi Landström, Jonathan Rider, Sophie Meering, Rob Jones, Lucy O'Sullivan, Roy Rose, John Demmer.

Cover Image
Kim, Hyung Tak by John Stanley

Photography
All copyrights and trademarks are recognised and respected

Advertising
Media packs are available on request
Account Manager Erica Meese
erica.meese@international-media.com

International Licensing
Bow International is available for licensing. Contact the Licensing team to discuss partnership opportunities.
erica.meese@international-media.com

Printed & distributed by
Cliffe Enterprise
Unit 6f Southbourne Business Park United Kingdom, Courtlands Rd, Eastbourne BN22 8UY
cliffe-enterprise.com

ISSN 1746-6130

We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards. The manufacturing paper mill holds full FSC (Forest Stewardship Council) certification and accreditation.

All contents © 2023 International Media Limited or published under licence. All rights reserved. No part of this magazine may be used, stored, transmitted or reproduced without the prior written permission of the publisher. Information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. International Media cannot accept any responsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this publication. Apps and websites mentioned in this publication are not under our control; we are not responsible for their contents or any changes or updates to them. This magazine is fully independent and not affiliated with the companies mentioned herein.

If you submit material to us, you warrant that you own the material and/or have the necessary rights/permissions to supply the material and you automatically grant International Media and its licensees a licence to publish your submission in whole or in part in any/all issues and/or editions of publications, in any format published worldwide and on associated websites, social media channels and associated products. Any material you submit is sent at your own risk and, though every care is taken, neither International Media nor its employees, agents, subcontractors or licensees shall be liable for loss or damage. We assume all unsolicited material is for publication unless otherwise stated, and reserve the right to edit, amend, and adapt all submissions



LIVE LIFE AT FULL DRAW

Hello, and welcome to Issue 175. This issue is dedicated to the one and only Kim Hyung Tak, my coach and mentor, known to most simply as Coach Kim. In anticipation of the twentieth anniversary of his School in Goesan next June, I sat down to talk to him about his life, his school, and some of his experiences during his 50-plus year career in archery. In addition, you will hear from some of the students who were visiting Coach Kim's School, and we will take a peek at some of the archery technology developed for the Korean archers by their Hyundai patrons.

This issue will also bring you highlights from the annual Archery Trade Association Show in St Louis, Missouri, and walk you through some of the latest 2024 target gear. Duncan Busby will tell you all about the Gold Tip arrow range, Lucy O'Sullivan will tell you how to keep your shoulders strong this winter, and Rob Jones will share his tips on shooting in cold weather and improving

your game at unmarked rounds. We will also hear from some of our other experts, with John Demmer offering in-depth advice on plunger and arrow rest tuning for barebow.

As part of our collaboration with the Society of Archer Antiquaries, we have received a rare and fascinating insight into the practice of archery in Nuristan, a remote province of Afghanistan, written by Jonathan Rider, a Fellow of the Royal Geographical Society, who has worked in Afghanistan for the last decade. Enjoy. Keep your eyes on the target.



Kristina Dolgilevica, Editor
editor@bow-international.com

f /BOWINTERNATIONAL @BOWMAGAZINE

CONTENTS



IMAGE: JOHN STANLEY



SOURCE: ATASHOW.COM



IMAGE: GOLDTIP.COM



IMAGE: JONATHAN RIDER

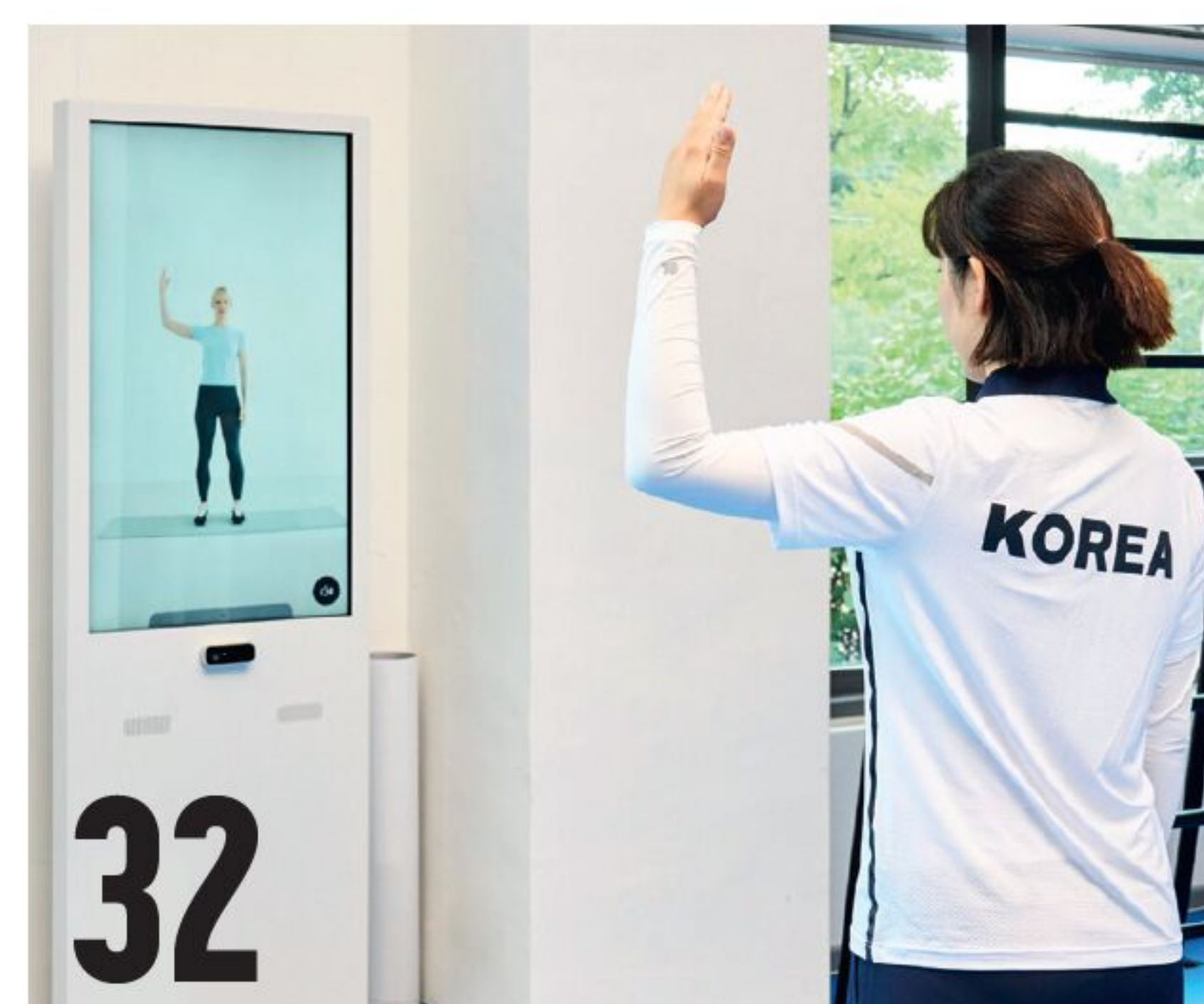


IMAGE: HYUNDAIMOTORGROUP.COM

6 News

Extra news from the Archery GB National Indoor Weekend

8 Legendary Coach Kim: Interview

World's best coach on skills, confidence, archery mistakes, and Olympic predictions

14 Kim Hyung Tak Archery School Testimonials

Athletes from all corners of the world talk of their experience in South Korea

16 The 2024 ATA Show in St Louis: Top Picks

Standout gear from the annual archery trade show

22 Gold Tip Arrows: The Range

Duncan Busby looks at history and the product range of the durable Gold Tip arrow

25 Product release: E1 Carbon Clicker by Eliza Archery

Is this the most durable and hassle-free clicker?

26 A Long Shot in the Hindu Kush: Archery in Nuristan

Jonathan Rider, a Fellow of the Royal Geographical Society, takes you on a journey

32 Why Koreans do it better

We look at the technology that finetunes the Korean archer

36 Review: NS-G vs NS-XP Wood limbs by Wiawis

Sophie Meering looks at which of the wood limbs will fare better

38 Top Field archery tips for cold weather shooting

Rob Jones shares his top tips

40 The new 2024 Axcel Achieve XP Pro

Introducing the latest in tournament sights

42 The Unmarked Game

Rob Jones shares his advice on how to improve in the unmarked rounds

47 'Put your shoulder to the wheel' with Lucy O'Sullivan

Winter is here - time to get those shoulders in tip-top condition

50 Ask the Experts

Roy Rose tackles your recurve and compound questions

55 Ask the Experts: Barebow

John Demmer answers your questions on plunger and arrow rest tuning

58 Final Note. Reflections.

Individuals carrying out any instructions detailed in this publication do so at their own risk and must exercise their independent judgement in determining the appropriateness of parts, equipment and environment for a particular use. Appropriate protective/safety gear should be worn at all times when handling dangerous equipment. To the fullest extent permitted by law, neither International Media, its supplier or any of their employees, agents, subcontractors or contributors shall have any liability in connection with the use of this information, provided that nothing shall exclude or limit the liability of any party for personal injury or death caused by negligence or for anything else which cannot be excluded or limited by law.

BOW NEWS

If you have a news story, email editor@bow-international.com

THE ARCHERY GB NATIONAL INDOOR CHAMPIONSHIPS: HIGHLIGHTS WITH MIMI LANDSTRÖM

The Archery GB National Indoor Weekend consisted of the National Indoor Championships, Junior National Indoor Championships, and the TRUBall Axcel Back2Back. We have underlined the main podium results in the previous issue, but due to a tight printing schedule were unable to share the highlights. Here are a couple of memorable notes from a weekend in December; we hope they bring back some pleasant memories to those who went.

JUNIOR NATIONAL INDOOR CHAMPIONSHIPS

The Junior National Indoor Championships is one of the busiest events for the AGB NIC. There are four junior champion title categories: the Age Group National, the Overall National, the Regional, and the Home Nations Champion. Every archer is put into the 'overall' division (within their bow style), as well as their age group division. A Portsmouth round is shot in each division, with the top four archers from the 'overall division' for each discipline shooting head-to-head to crown the National Champion.

Luke Davis, part of the youth GB team, had a phenomenal result with a 598 and a national record for the Junior Men Portsmouth round. The two 9s dropped by the successful compounder were both in end 2 of the second half. Luke also took the Overall National Champion and Under 21 National Champion titles.

Fun fact about youth events at Archery GB. To keep coaches and parents behind the youth archer and their equipment, a 'Parent Line' was introduced over the recent years. Giving young athletes space to be athletes, to have fun with their friends, to shoot their arrows and do their thing without feeling crowded by the supporting party, is a great idea by Archery GB. While most athletes and parents think it is a great idea, there are, of course, some that are not too keen.



BAREBOW JUNIOR CHAMP, OLIVER HICKS IMAGE: AGB

OVERALL NATIONAL CHAMPIONS

RECURVE JUNIOR MEN

- Callum Piggott
- Edward Gray
- Will Oakes

COMPOUND JUNIOR MEN

- Luke Davis
- Jay Saunderson
- Robert Bittles

BAREBOW JUNIOR MEN

- Oliver Hicks
- Samuel Bowden
- Tom Wiggins

RECURVE JUNIOR WOMEN

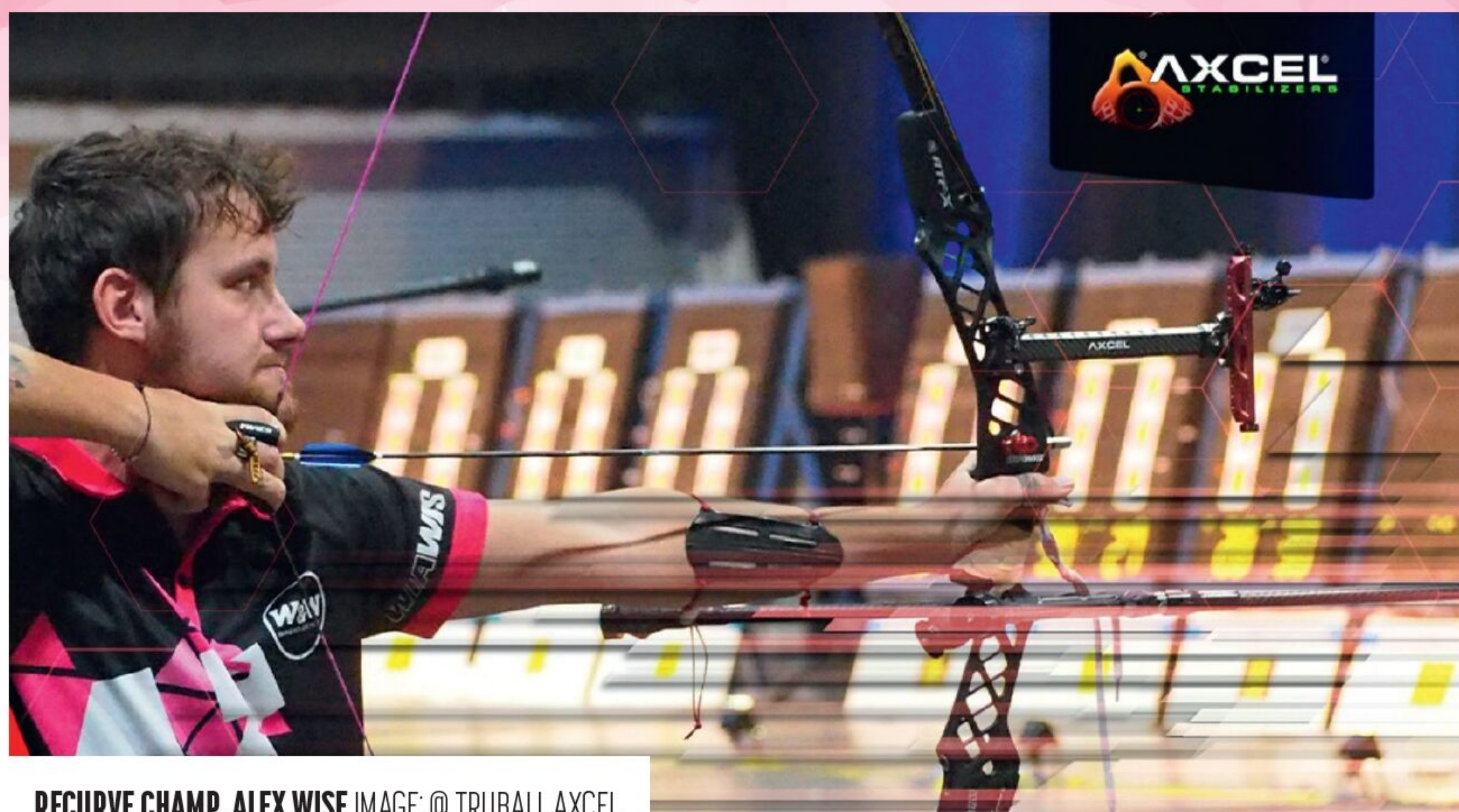
- Sophie Roberts
- Emelia Hughes
- Rebecca Edwards

COMPOUND JUNIOR WOMEN

- Louise Bassett
- Chloe Scott
- Sinead Byrne

BAREBOW JUNIOR WOMEN

- Jessica Lethbridge
- Amelia Chumber
- Freya Rennie



RECURVE CHAMP, ALEX WISE IMAGE: @ TRUBALL AXCEL

TRUBALL AXCEL BACK2BACK: ALEX WISE FINALLY DOES IT!

2023 was Alex's year. Following seven attempts, having previously taken different podium positions at this event, Team GB's Alex Wise finally won the coveted recurve division men's title! "It is a great event, and to finally walk away with the win means a lot. The Back2Back is the most stressful competition on the domestic circuit in the

UK. It would be great to see some more international archers come and participate, like in the compound men division this year. I'd like to thank TRUBall Axcel for sponsoring the event and helping make it as great as it is! I can't wait to be back next year." Big congratulations, Alex, and more of the same in 2024.

TRUBALL AXCEL BACK 2 BACK 2023 CHAMPIONS

RECURVE MEN

● Alex Wise

RECURVE WOMEN

● Gaby Schloesser

COMPOUND WOMEN

● Ella Gibson

COMPOUND MEN

● Mathias Fullerton

THE NATIONAL INDOOR SUMMARY

The National Indoor Championships is one of the most prestigious events in the domestic indoor calendar for GB. This year, Archery GB introduced an additional Friday night session, as the event always sells out so quickly; but even with an extra session, the demand was high as ever. Will the AGB provide another venue next year?

Youth GB archer Max Oakley shone in qualification in the Recurve Men division, shooting a new Under 21 national record of 589 and qualifying ahead of GB team member Alex Wise on 587, swiftly followed by fellow youth GB archer Edward Gray and Patrick Huston both on 586. In the recurve women, Penny Healey showed her indoor skills with 17 points between her and second

qualifier on 587.

Ella Gibson and her Darton continued their winning streak with 596, just one point off the World Record and nine points clean of second place qualifier. Josef Bosansky qualified first for the compound men with 592. However, despite winning the head-to-head matches he could not take the National Champion title as he is not British. This went to second-placed Ajay Scott.

The National Indoor Championships also has longbow and 50+ divisions, and with each year, the event shows growing demand for the spots. Keep a look out on Archery GB's social media pages and come join us for three days of elite indoor archery next December!

BCY

BOWSTRING

**BOWSTRING MATERIALS,
SERVING,
AND ACCESSORIES**

For what you need

BCY HAS YOU COVERED

Rely on BCY

BCYINC.COM
+1-860-632-7115

**MANUFACTURED
IN THE USA**
Some raw fibers are produced overseas

IMAGE: JOHN STANLEY (PHOTOGRAPHER)

A photograph of a man in a dark sweater aiming a bow. He is looking intently at the target. In the background, another man is visible, also looking towards the target. The setting appears to be an indoor archery range with blue walls and bright lighting.

**"LEARN BASIC SKILL, DO NOT USE A STRONG BOW
AND DON'T START SHOOTING LONG DISTANCES TOO
EARLY – THAT'S VERY IMPORTANT."**



LEGENDARY COACH KIM: INTERVIEW

Coach Kim on his School, archery skill, confidence and Olympic predictions. By Kristina Dolgilevica.

2024 will mark the twentieth anniversary of the Kim Hyung Tak Archery School training centre in Goesan-gun, Central Korean province. The facility opened its doors on August 24th for the first time. Kim Hyung Tak, known to everyone as “Coach Kim”, is no ordinary coach. What makes him a living archery legend is the sheer scale of his contribution to the development of the sport of archery since the beginning of his coaching activity in 1970. The development of modern archery in South Korea began around 1963, a time when Coach Kim first took up archery in high school. He then continued to practise as a youth during his three-years of military service. In 1970 he took up Korean traditional archery, and in the same year began coaching, subsequently becoming the first paid professional archery coach in South Korea. Coach Kim’s contribution to his nation’s pre-eminence is too great to do justice to it here, but certain achievements stand out.

He brought South Korea its first Olympic gold medal in 1984 as head coach of the Women’s National team. Between 2004 and 2016 he served on the World Archery Coach Committee in Lausanne, Switzerland, coaching, conducting seminars, and creating learning material for coaches and archers. He was first to champion compound archery in South Korea, and is one of the first sports coaches to use video analysis as a tool in form analysis, in which he continues to be an expert.

In fifty-three years of coaching, Coach Kim visited over forty countries to deliver his developmental seminars for athletes and coaches, and archers from over fifty countries have visited him in his training centre. Today, he continues to work at his training centre almost every day, runs his own coffee shop a few minutes away from the school, and teaches golf to students in the local Jungwon university. Coach Kim loves animals, has a dog and a cat; he loves sashimi, and his favourite colour is red.

Note: language has occasionally been modified and edited to help the sense and flow of Coach Kim’s narrative



OVER FOUR THOUSAND UNIQUE STUDENTS FROM FIFTY DIFFERENT COUNTRIES STUDIED AT THE TRAINING CENTRE IN GOESAN SINCE ITS OPENING IN 2004 KIM HYUNG TAK

How did you start your own School in Goesan?

One day I came to Goesan to take part in a Korean Traditional archery competition. During my visit I decided to check out the city and saw many lovely rivers and mountains – it is a very clean city. So I bought some land and built a house. Soon after, I met with the city mayor to discuss the opening of the training centre. It was good for the Goesan city and comfortable for the archers that come to camp from around the world. The area itself is very nice, not too many cars on the road. [From the spot where the School stands], on the left you have the mountains, on the right you have the Korean traditional archery range; these were the perfect conditions, and I decided to build the training centre here. The building itself [architectural complex] was my idea.

Do you know, roughly, how many students you have had here over the years?

The training centre opened in 2004, so from that time to now [end of 2023], around four thousand archers from fifty different countries have visited my training centre. After training here some of them took Olympic gold medals, and some became World Cup or World Championship medallists and champions.

As an international Korean coach, do you encounter language difficulties? What languages do you work in?

Most archers will understand my teaching material. I worked in Taiwan (Chinese Taipei) as a national team coach [1989-97], so I learned Mandarin. I learned English before that - I don't think it's perfect, but I can communicate with archers. From 2004 to 2016 I was working for the World Archery Coach Committee. WA produced their coaching manual; around six or seven people participated in the making of it, and the video material used in the coaching manual was made at my training centre. Then I published my archery book in 2010, and many countries worldwide adopted its principles. I also made an application in 2018; So, yes, most archers will understand my teaching material.

What bow styles do you work with the most, and can you highlight any personal practical experiences besides the Olympic recurve?

I mostly work with recurve, and then compound. In fact, I started the development of compound in Korea. So I also shot compound for about two years. If I don't shoot it, I don't understand it. How could I be teaching it if I don't have the "feeling"? So, to get as much knowledge as possible to

teach it, I went to learn from many famous compound archers and coaches. I have a long history with the Korean traditional bow. I started in 1970, and I have Dan 5 (of 9), Master. I was teaching coaches at Korean Archery Federation [traditional]; they host annual seminars, and I was teaching the technical part. I like all kinds of bows and I can teach all kinds of archery.

Did archery come naturally to you?

Yes. I was always teaching also, so my life is all archery. I made a good choice; I selected this sport. When I was younger [1970s], we didn't go to the overseas games because at that time, the KOC (Korean Olympic Committee), the Korean sports they didn't have enough budget and they didn't have the information about the overseas competition scene, so we only did domestic competitions. When I was serving in the army, I was in the sports team, so I was shooting archery for three years during my time in the army.

Do you have any other hobbies?

I like fishing. I can do some thinking during fishing, work on my mind control. During archery coaching I like to play golf. (If you ever visited the School, you would have undoubtedly been entertained by Coach Kim's golf swing and putting practice between archery ends.) I have received a



TRIUMPHANT COACH KIM WITH HYANG-SOON SEO, INDIVIDUAL LA84 OLYMPIC GOLD MEDALLIST. PHOTO NOW HANGS AT HIS COFFEE SHOP.



"[ARCHERS ARE NOT CONFIDENT] BECAUSE THEY DIDN'T ACHIEVE GOOD BASIC SKILL. IF THE TECHNICAL SKILL IS NOT HIGH ENOUGH, IT'S IMPOSSIBLE TO MAKE THE MENTAL SKILL HIGHER."

professional golf teaching licence, so I am currently also teaching golf at the local university. But golf is just a small part, my whole life is all about archery.

You work with different archers, recurve, compound, and sometimes barebow. Do you notice any particular issues/problems?

Oh yes. With recurve, the big problem is that many archers make mistakes during release. Problems occur before the release, when they don't make a good body angle; [stance, posture, alignment, which prevents proper expansion]. It's impossible to make a good release without good expansion. So, these archers need to have good basic skill to make a good release.

For compound it's issues with aiming and trigger 'punching'. First, aiming is very important in compound and it is very important to be stable during aiming. If body balance shifts from body centre to the-back-to-the-front, to the-back-to-the-front, it's impossible to make your aiming stable. Body centre is very important in compound. Second, a compound archer should not be 'punching' the thumb release, and, regardless of the release aid type, firing should happen during aiming, and should always come as a surprise.

Archery is a balance sport; the pushing, the pulling, maintaining power in the centre is very important. Barebow archers don't use the clicker, so, making and keeping the power the same at full draw is important; they often lose the power in the scapula [meaning, they do not use back tension]. Big muscles should keep the arrow in position [to avoid creeping

and draw length inconsistencies], and they should not use their hand (draw arm) to hold the power. I think it is very important. Other issues are with the tilting of the bow (canting) and string alignment, which are important because barebow archers don't use the sight. They must make the right body angle [stance, posture, alignment to correctly align the bow, in order to achieve good string alignment].

For those who haven't visited your centre, tell them how you begin to work with the new trainee?

First, I use a video analysis programme. I begin by analysing the archer and then decide how I am going to teach this person. Archers of different levels come to my school, lower level, middle level, high level of skill. Someone who has been shooting for two, three or five years are a low-level skilled archer, so I prepare them for the future. High skill level archers, I usually prepare them for competition by selecting a suitable method for them. So, I work with different archers, focussing on their level. During the regular training day, with some archers I check equipment and do some bow tuning; sometimes I may give (an impromptu) seminar to the archers for better equipment or technical knowledge, and sometimes we talk about the mental control training.

Tell me a bit about archers you are working with today; what are you working on?

This morning (around 9am) I came to the centre and checked every archer one by

one, to see how they are doing with their programmes. With Deepika (Kumari) we are working on her release. We began working on it yesterday, so today I will make a video to check again if it's correct or not. Nowadays archers are scoring very high, and you have to keep up and achieve better precision. Many coaches only use their eyes to work, but using a computer video programme makes it easier to understand what needs to change.

Do you like to work with Korean archers?

Of course. Some archers (from the Korean squad) who aren't shooting well, they visit here, and I help them. Oh Jin Hyeok, is one example; before getting onto the National team, he visited here and I helped him, and he continues to be on the team - for 15 years now. But I like working with everybody and I like archery, and archers I work with are like friends. I like the human interaction involved in teaching. It is very important to have good communication and friendship with the archers. (Coach Kim called it "humanship".) [In general] I work more with international archers, because the Korean archery team has its own coaches, but I do make technical seminars and work more directly with the Korean archers at the Korean Archery Association [Federation].

What is more important, physical or mental condition of the archer?

I think that physical strength is not that important, mental strength is. How to build a strong mental condition during the competition, that's what's important

for archery. But everyone can shoot, small, tall, whatever - physiologically, it is not a problem. Everyone can achieve good physical condition [if they invest in themselves], so it also depends on the archer's personality. I think some archers are mentally very strong, some archers have a very strong physical condition, but because we are human it is impossible for everyone to be very strong. Many archers are not very confident, they worry a lot. They need more confident and positive people [around them].

Why do you think these archers have low confidence?

[Terminology - Basic and technical skill: here 'basic skill' refers to a thorough understanding and application of the WA standard of archery technique up to level 3; in most instances, the term 'technical skill' relates to mastery, or the level of competency and proficiency of technical skill in practice.]

Because they didn't achieve good basic skill. If the technical skill is not high enough, it's

One of the common issues that archers bring up is target panic; is it just anxiety or is it something else?

Very few professional archers usually have target panic, otherwise they wouldn't be professional. In compound [gestures hesitation on trigger], target panic usually happens because the power moves more to the back, it moves back into the hand, and is not kept back; that's why compound archers often 'punch' the trigger as soon as they are in the gold.

So, is it about the timing?

It is. This is because most of the power is in the hand. The hand needs to be relaxed, the elbow brought back, keeping the scapula engaged [back tension]. If beginners experience target panic, it means they haven't made a good basic skill, they tend to have problems with aiming at the yellow, aiming up or down. If you have target panic, you should do the humming exercise, making a sound during aiming and focus on the

Park Sun Hyun is best archer in the world.

Outside of Korea?

It is difficult to say, sometimes this archer comes along, sometimes another. Deepika Kumari here is a very nice archer, very nice right? [Deepika is present – she smiles.] I am also working with Casey Kaufhold, she is coming up. Martin Damsbo from Denmark is good. And Brady Ellison is a good archer. But it is difficult to say who is the best. There is no "best archer"; at every competition, someone else wins, and you can't win all the time. Tomorrow Atanu [Atanu Das, also in the room and smiling], next day, Deepika, the day after, someone else.

Best advice for young archers...

Learn basic skill; first make the body angle [stance, posture and alignment]; second, do not use a strong bow and don't start shooting long distances too early – that's very important.

Best advice to archery coaches...

An archery coach must research. An archery coach has to develop a teaching method. An archery coach must use more sports science and video software programmes. It is very important to not only use the eye.

Lastly, what are your predictions for Paris 2024...

Atanu, what do you think? [everyone laughs].

Atanu Das: I'm winning!

But now, here, we still don't know who will go to represent Korea in Paris 2024, maybe some new archers will win that gold medal. Almost every time the new archer in the team wins the gold medal because there is more pressure for the older members; for the new one – no pressure.

Korean Ladies Team, 10th Olympic gold?

Yes. Yes.

코치님 감사합니다 (Thank you, Coach!)
For more information on Kim Hyung Tak Archery School visit www.archeryschool.com
For enquiries regarding dates and fees please email archeryschool@gmail.com
Read full exclusive interview with Park Sun Hyun in Bow Issue 152 🕒

"AN ARCHERY COACH MUST USE MORE SPORTS SCIENCE... IT IS VERY IMPORTANT TO NOT ONLY USE THE EYE."

impossible to make the mental skill higher. Technical makes up about 20% of all, however with the mental side, 100% makes everything work. Here is one example. If one of the top one hundred Korean ranked archers from South Korea goes to another country, they can easily make that country's national team. Not every one of those 100 archers will be mentally strong, but they will have good basic and technical skills, and maybe 1, 2, or 3% of those top 100 will need the mental. So, if you have good basic skill and can make good technical skill, the mental will also come up; it works together, technical comes up, so does the mental.

For high level archers, it is important to note how to train on the field; some archers just enjoy themselves, some are very concentrated. Competition requires good level of concentration and if you just enjoy the practice, it is impossible to achieve a good score in competition. So, I think it is important to make the appropriate training conditions.

Here, at the training centre, it can be difficult because many archers don't stay here long-term, so I focus on the technical, and, only on occasion do I talk to archers about mental training. If they are archers who prepare for competitions and I have been working with them for one or two years, then I also build the mental training.

sound, not the aiming. This is an easy recovery from target panic.

Would you say that target panic can be fixed with technique?

Yes.

Do you think technique is more important than equipment?

Oh, both. If you are good technically, you can shoot 300 at 70 metres. If you have good control of your equipment, you can shoot 310. After you make good technical skill, include equipment. But archery equipment is very important for the high-level archer. Do you know, technically, the high-level archer is very similar [process reproduction], but good control of equipment becomes more important. Once the high technical level is achieved, equipment plays an important role in deciding whether the arrow is touching the line or not. If the arrow hits nine, there must be a mistake, but if they can control their equipment, they hit the ten. Plus, good bow tuning will help when it's windy.

Who is the best archer in the world?

WIAWIS

2024 NEW NS-XP



HEAT REFLECTIVE
COOL PIGMENTS



SOFT EPOXY
FILM



*Technical information
check!*

MOST HEAT RESISTANCE, STABILITY & ACCURACY

GRAPHENE
NANO CARBON TECH

HEAT REFLECTIVE
COOL PIGMENTS

FOAM CORE WOOD CORE

WWW.WIAWIS.COM



"COACH KIM TAUGHT ME TO BE POSITIVE." - GAYANE WON HER FIRST NATIONAL GOLD IN 2020, AFTER VISITING COACH KIM. IMAGE: HARRI VERHO

GAYANE BOTINELLI HELSINKI, FINLAND



Archery experience

I have been a member of the Finnish National Team since 2019 and have shot recurve on the elite level since 2018.

How did you hear about the School in Korea?

I first heard about the school at the World Cup in Turkey, in May of 2019. Shortly thereafter, in November of the same year, I travelled to Korea, to learn under the watchful eye of coach Kim. I then saw coach again in 2022, I attended his seminar at the World Archery Excellence Centre in Switzerland.

First impressions

Upon my arrival to Coach Kim's School in South Korea, I was greeted by him as if I were his family member. He introduced me to all other students who were there at the time and we all instantly became friends; we haven't lost contact since. I was particularly touched when, on our final day, Coach got up super early to say goodbye to us all and to wish us all success in our archery.

How did Coach Kim help you?

Coach Kim taught me to be positive. During my time in his school, I recall saying to him again and again that I had a problem with this and that, and something else. But he kept correcting me and assuring me that none of that constitutes a problem, and that everything can be resolved. In my technique, Coach Kim taught me how to improve my release, and after just three months, thanks to that newly found skill, I have become the Finnish National 25m distance champion, a first in my career; later, that same year, I took silver at the Finnish national 18m discipline.

What do you like about the School the most?

Everything in the School is organised so you can visit in summer and winter, shooting long distances. The school is conveniently located, and I found the living quarters comfortable. Daily training schedule is regimented and there are two training sessions per day, morning session, after breakfast, afternoon, following dinner. We shared all our meals as a group and every training had allotted rest periods throughout the day. I found that it is easy to shoot over 200 arrows in a training day without getting tired.

Where are you with your archery today?

I am currently preparing for the summer season, whilst working full time. This year, during my winter leave, I will be taking part in the 2024 World indoor series. As my schedule is so busy at the moment, I will be meeting Coach Kim next time in Switzerland once again.



IMAGE: DENNY DECKO

DENNY DECKO JAKARTA, INDONESIA



Archery experience

I am a National team Coach of Indonesia, coaching recurve men and women, and have been coaching for eight years. I am also a recurve athlete myself and have shot recurve and compound for twelve years now.

How did you hear about the School in Korea?

In 2016, from my archery association. I went to Coach Kim's five times.

First impressions

Coach Kim is the greatest coach I have ever known. He has extraordinary experience up to the Olympics and everyone seems to want to learn from him, coaches and athletes.

How did Coach Kim help you?

He inspired my coaching style and method, especially his personality.

What do you like about the School the most?

Coach Kim.

Where are you with your archery today?

I'm working with our national team, and we have already earned two Olympic tickets. Currently preparing to earn another ticket in Antalya (Hyundai World Cup Stage 3) next year.

Would you return to Coach Kim's?

Of course, I want.



“...[COACH KIM] PAYS A LOT OF ATTENTION TO THE STUDENT’S EMOTIONS, WHICH HAVE A GREAT EFFECT ON THE SHOOTER’S MINDSET WHILST SHOOTING.” IMAGE: RAKSHAK PATIL

RAKSHAK PATIL BANGALORE, INDIA



Archery experience

I joined archery in 2016 and have taken it up professionally since then. I shoot the recurve bow.

How did you hear about the School in Korea?

My mom fully supported my decision to pursue archery; she did some research to find the best training programmes available and came across an article about Coach Kim. Soon after, she contacted him via email and inquired about the training details. I first went to Coach Kim Hyung Tak’s archery school in July of 2017, and stayed there constantly (except when I had to go back to India to renew my Visa). The last time I was there was December 2019.

First impressions

My first impression of Coach Kim was that he was very welcoming and very gentle as a person.

How did Coach Kim help you?

I had a lot of mistakes with my shooting when I first arrived, but he made me feel like it was no issue. Within a week he had changed my shooting technique and the strain on my back was so relaxed. I feel that Coach Kim has supreme knowledge in every aspect of the sport. His ways of coaching are very unique as he knows which part of the shooting must be changed according to each different individual. He does the same with the student’s mindset, he pays a lot of attention to the student’s emotions, which have a great effect on the shooter’s mindset whilst shooting.

What do you like about the School the most?

The school is a very beautiful place. A beautiful river passes through the town with hills all around. It is very pleasant and relaxing to be practicing in such a place. During your stay, Coach Kim gives all students a bicycle, so I used to love cycling around the town. I really loved the food there too.

Where are you with your archery today?

Right now, I am taking some rest because of the shoulder muscle tear due to excessive shooting.



KIRSTINE EARNED HER INDIVIDUAL BRONZE AND MIXED TEAM SILVER AT THE 2022 EUROPEAN GRAND PRIX IN PLOVDIV IMAGE: WORLD ARCHERY

KIRSTINE DANSTRUP ANDERSEN COPENHAGEN, DENMARK



Archery experience

I have been shooting for close to 15 years, I shoot recurve.

How did you hear about the School in Korea?

I believe I first heard about Coach Kim through a coach at the club where I started shooting. I have visited Coach Kim’s Archery School once, in November of 2019.

First impressions

My first impression was that he was very light-hearted! I was nervous about meeting him, but he made jokes with us, and was generally very pleasant to work with.

How did Coach Kim help you?

It’s been a while since I worked with him, but as far as I remember, he mostly helped me get my technical basic skills in order.

What do you like about the School the most?

I really like coach Kim’s approach to technical work; in spite of the language barrier, he is a good communicator and makes [information] easily accessible through the use of the video analysis. Staying at the school and meeting archers from across the world was also a really memorable experience!

Where are you with your archery today?

I am shooting full time, going to international competitions, and trying to make it to the Olympics next year.

Would you return to Coach Kim’s?

I would like to return to his school at some point, but it depends on my finances. ☺

For more information on Kim Hyung Tak Archery School visit:

www.archeryschool.com

For enquiries regarding dates and fees please email:

archeryschool@gmail.com

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal,
providing you various content:
brand new books, trending movies,
fresh magazines, hot games,
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



AVX LIVE . ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>



2024 ATA SHOW WENT DOWN A STORM

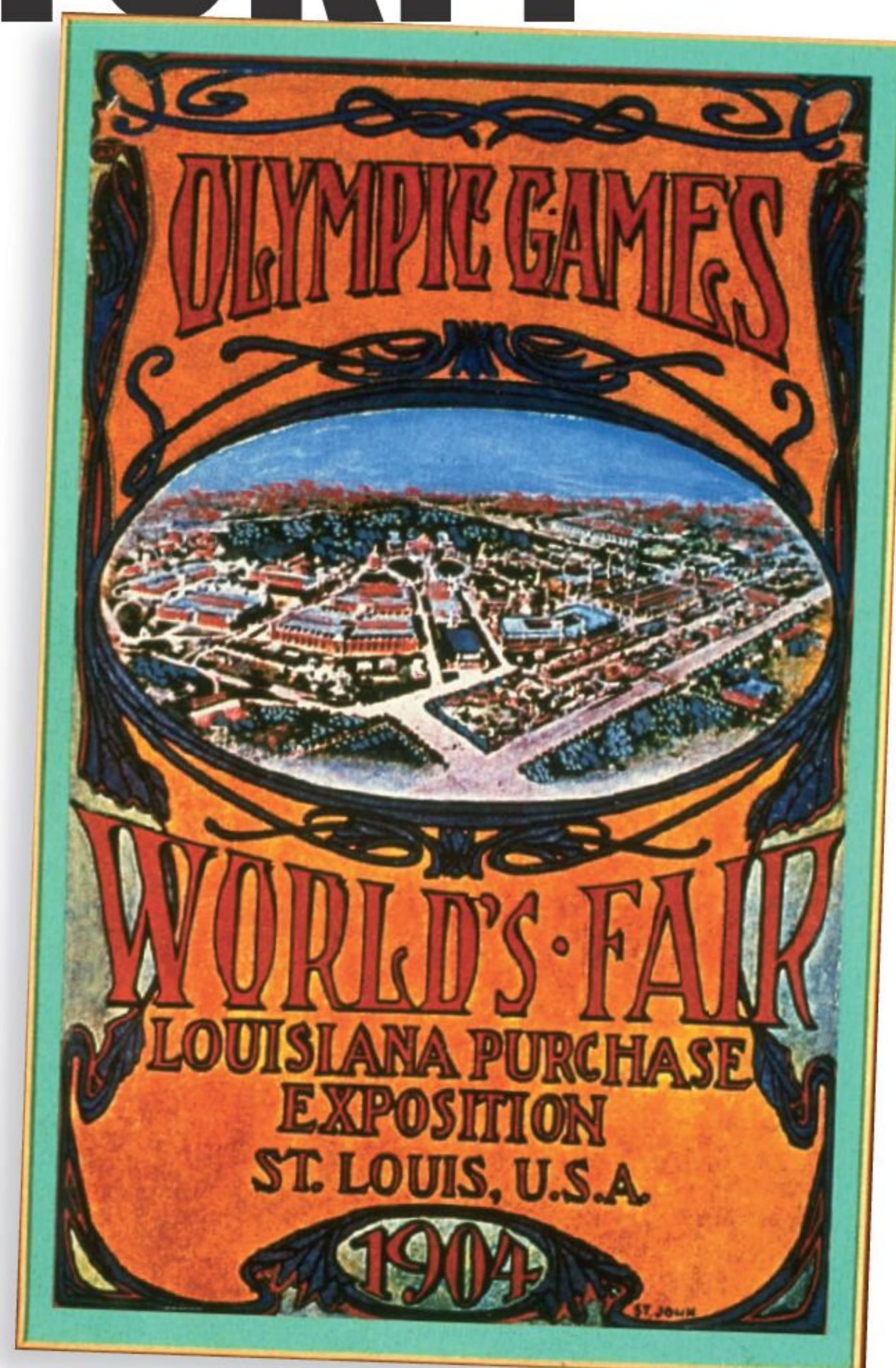


Kristina Dolgilevica brings highlights from the archery trade show in stormy St Louis

The ATA Show is the biggest event of the year for archery and the bow hunting industry professionals in the United States. It is a place where both the most reputable and the up-and-coming archery businesses come to meet, network, exhibit and launch their new products. This year the show was held at the America's Convention Centre in downtown St Louis, Missouri for the first time. Over the course of three days (Jan.11-13), the ConventionCentre welcomed hundreds of exhibitors and thousands of visitors, though the severe weather reduced their numbers to fewer than expected; at times the temperature

dropped below -20 Celsius and threw up multiple snowstorms, causing the cancellation of multiple flights. However, the show must go on. 156 new products were launched, talks and lectures took place, coaching and bow technician licenses were given out, and awards presented to the best. Though the show predominantly focuses on the bow hunting community, I nevertheless had ample opportunity to network with brands that cater for both target and hunting scenes. Here are my top picks.

1904 GAMES COINCIDED WITH THE WORLD FAIR AKA THE LOUISIANA PURCHASE EXPOSITION. ADVERTISEMENT FOR THE 1904 SUMMER OLYMPICS AND LPE IMAGE: PUBLIC DOMAIN



DID YOU KNOW?

» St Louis was host to 1904 Summer Olympics; the first Olympic Games held outside Europe

» The three-medal format, gold, silver, bronze, was introduced at the St Louis 1904 Games for the first time

» A total of 29 archers, 23 men and 6 women, competed in archery, but all were from the USA, so it was essentially the USA Nationals with a bigger international audience

2024 NEW

WNS

WNS-ARCHERY.COM

2024 NEW

WNS

2024

WNS

2024 NEW

QUALITY
PRODUCTS
FOR ALL
BY WIN&WIN



EOLLA 20



QUANTUM AX



ELNATH FX



LIVERATE DX



HYPERION G8



PROCYON C5 F0AM



PROCYON C5 WOOD



ARMATO C3 F0AM



ARMATO C3 WOOD

HAMSKEA QUICK CHANGE WEIGHT KITS – A REVOLUTION IN STABILISER WEIGHTS

This stabiliser weight solution seeks to resolve the finnickiness of having to tinker with the stab weights and screws when the archer is out and about – the quick-change stabiliser weight system allows the archer to change their weight swiftly and securely with minimum effort and zero time wasted on messing with Allen keys. This is particularly useful when in the field, when tuning or making changes to equipment, or when developing in practice. The innovative magnet-based Lynx-Lock technology requires no extra screws; the larger weight increments are fixed solid with a screw, whereas the smaller ones lock tightly together via magnetic force; unscrewing the components is effortless, yet when screwed back onto the fixture it is locked solid. In addition to individual components, there are four kits on offer, so head to www.hamskeearchery.com for full details and options. **Prices:** \$118-390.

1.1oz END CAP TOOL

1oz END CAP

1oz IN-LINE WEIGHT

4oz IN-LINE WEIGHT

8oz IN-LINE WEIGHT

5/16-24 FHCS INCLUDED

2oz STARTER

IMAGE: HAMSKEAARCHERY.COM

• MAKE QUICK ADJUSTMENTS WITHOUT TOOLS

• EASY GRIP DIAMOND KNURLED EDGE

• SET SCREW LOCK DOWN FEATURE

• UTILIZES HIGH STRENGTH MAGNETS LINX-LOCK™ TECHNOLOGY

• AVAILABLE IN BLACK OR NATURAL STAINLESS STEEL

• NON-CORROSIVE DESIGN



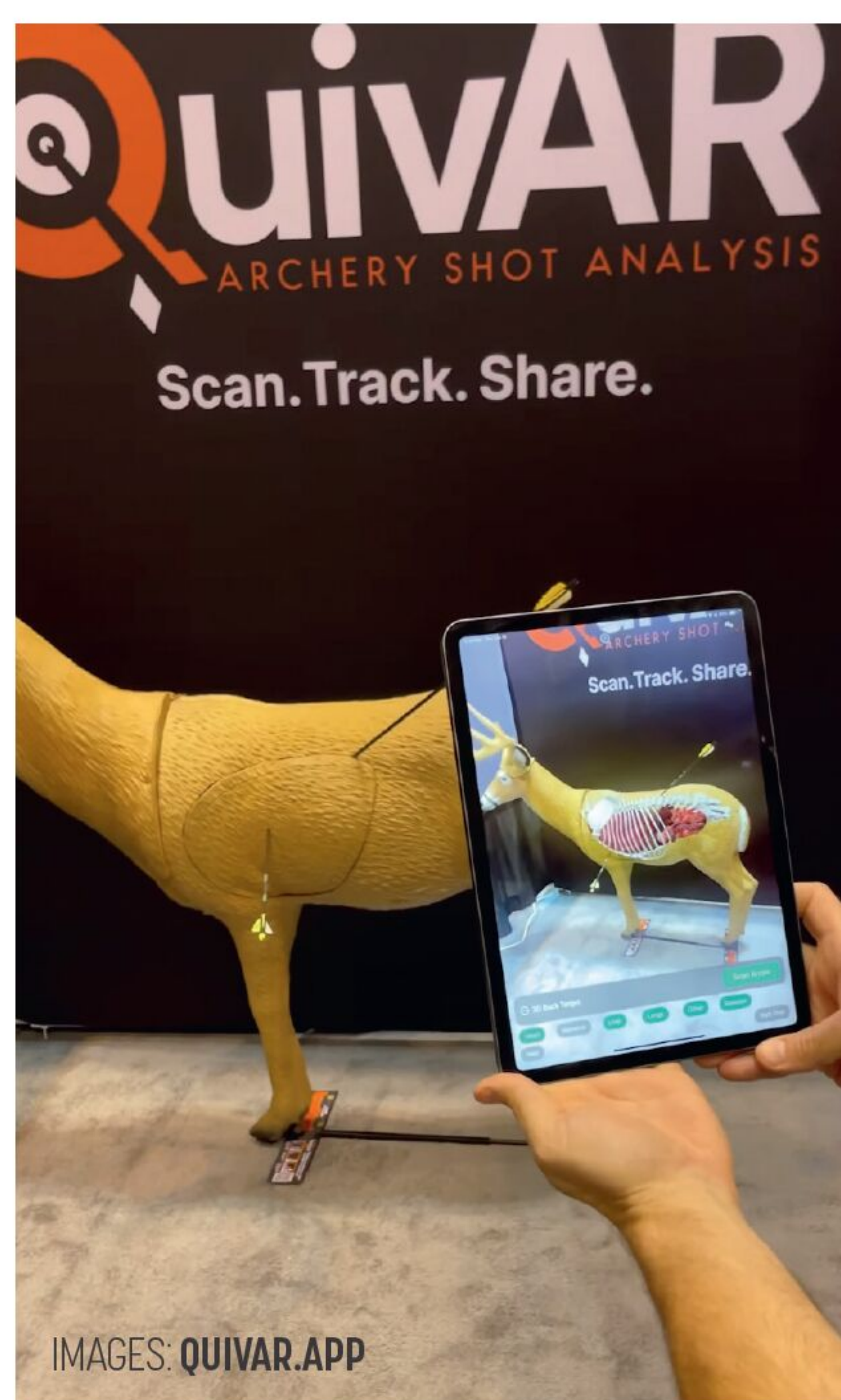
PATENT PENDING

HAMSKEA WAYPOINT ARROW LEVEL – A TOOL YOU DIDN'T KNOW YOU NEEDED

A surprising little find. This small professional grade archery tool allows you to easily measure the exact vertical and horizontal position of the arrow in relation to the riser shelf for either initial bow set-up or data collection once the tune is complete. The laser-engraved rulers allow the archer to accurately measure centre-shot and arrow height with increments of 0.050" marked on the rulers. This small device measures it all for you, and if you are in a habit of keeping records, the detailed measurements can easily be set and recreated to position your arrow shaft exactly where it needs to be in a matter of seconds. Think about those tuning sessions where you try multiple shafts or when you are changing seasons. A must-have. For more information and tech sheets visit www.hamskeearchery.com. **Price from** \$89.99



IMAGE: HAMSKEAARCHERY.COM



IMAGES: QUIVAR.APP

QUIVAR™ VIRTUAL TARGET APP – YOU THINK YOU'VE SEEN IT ALL

QuivAR™ offers automatic archery shot analysis and tracking. Aside from its use in bow hunting, one of the key features of this app is that it allows the archer to judge those line-cutter shots with unprecedented accuracy. The system also allows you to scan the arrow in space and see the vector of the arrow shaft in a 3D space. In addition to other useful features, it offers a sophisticated arrow tracking and metrics systems to analyse and store data of your grouping and performance; the archery training log will analyse trends and will let you know if something is out of order, plus, you can share your results and data with others. The key feature for the bowhunters and 3D archers is that the QuivAR™ offers a feature that overlays lifelike internal animal anatomy onto any 3D or 2D target. Visually striking and perhaps most hi-tech archery app on the market. Apple and iPad compatible. To get the demo version visit Apple Store.





Christopher Feltus
SIGNATURE SERIES

IMAGE: TRUBALL.COM

TRU BALL ULTIMATE FLEX

This, winner of the best new release ATA award, is a thing of beauty. Available in small, medium and large, three and four finger articulation, this model comes with a highly defined finger bed, a magnetic jaw/gate return feature in the cage, a micro-adjustable click length, and a micro-adjustable back-tension speed. Patented, adjustable Comfort Flex Technology 3 finger articulating handle piece allows for 30° of radial rotation (15° forward and 15° back). Quicksilver finish, anodized red aluminium head, weighty brass handle, corrosion resistant. For more details visit www.truball.com and contact local distributors for orders.

"THIS MODEL COMES WITH A HIGHLY DEFINED FINGER BED, A MAGNETIC JAW/GATE RETURN FEATURE IN THE CAGE, A MICRO-ADJUSTABLE CLICK LENGTH, AND A MICRO-ADJUSTABLE BACK-TENSION SPEED."

IMAGE: GAS BOWSTRINGS



INDUSTRY'S FIRST ENGINEERED RECURVE STRING - GAS PRO RECURVE +

This revolutionary 2024 product is a result of a three-year joint experimentation with one the world's most accomplished Olympic archers, Brady Ellison. Recurve+ Bowstrings are made out of an innovative, patented material called RCX1200, a material produced exclusively by BCY for GAS Bowstrings, and is a blend of SK75 and SK99 Dyneema, a blend that creates the perfect balance between a soft and elastic string without elongation. This material is only available in its natural white colour with no added colour dye for ultimate string performance. Recurve+ are engineered with a ground-breaking process called, R + TS or Recurve+ Tensioning System. One of the stand-out

features is in end-loop construction. GAS Bowstrings' new SenseTek Suppression Loops are served with a soft material to enhance the feeling of the string both on the draw and during shot execution. These loops also serve to protect limb tips from wearing down. End servings are served just below the end loops to dampen the sound of the strings, create a more flexible string, as well as add to the softer string feel. Available as a 'standard', served with black BCY Halo, or 'custom'. Brady prefers a 20 strand, but you can also opt for a 16 or an 18 strand string. For full details, options and orders visit www.gasbostrings.com.
Price: \$60.00.





THE FINEST SPIRITS MADE EASY

*Thousands of whiskies, gins, Cognacs and more
Build your own tasting set, intuitive
gift finder, fast delivery*

MASTER *of* **MALT**

masterofmalt.com
🐦 📘 📷 /masterofmalt



AAE AIRRAZR PRO/26 & TALON 3.0

Some new vanes from AAE for you to play with. Vane selection is a highly personal choice, and you can only really find what works best by trying it with your form and set up. Air Razor Pro and Talon 3.0 come in an interesting shape, resembling the Formula 1 racing car shape, similar to the AAE Pro Max. These two however come at a lower profile, and you might have guessed that, like the F1 car, the shape is meant to increase the speed. The longer Talon would be best suited for indoor or shorter distances and the Pro for the outdoor game. The material is flexible which will reduce clearance issues, and minimise the possibility of vane deformities and tears, especially when those arrows dive deep into the target. Paige Pierce was already spotted testing the Airrazr 26s. Why not order a sample pack? Visit www.arizonaarchery.com for more information.

“THE MATERIAL IS FLEXIBLE WHICH WILL REDUCE CLEARANCE ISSUES, AND MINIMISE THE POSSIBILITY OF VANE DEFORMITIES AND TEARS, ESPECIALLY WHEN THOSE ARROWS DIVE DEEP INTO THE TARGET.”

TRUE-TRACK ARCHERY STABILISER, 8/10 INCH

This all-new version of the stabiliser is made from high-strength carbon fibre and is designed for durability in tougher outdoor terrain. Whilst it is a great item for the bow hunting community, it will undoubtedly come in useful to all those die-hard 3D compound enthusiasts. Limbsaver say it is their best stabiliser yet, and it provides an even more superior shock and vibration absorbency than before, improving stability and dampening the sound. Reduced vibrations lead to a reduced bow jump, thereby improving bow stability during and after shot execution. These 8- and 10-inch stabilisers are complemented by the innovative vibration-dampening orbital weighted node which utilizes both weight and compression technology. Available in black and silver. For more information and orders visit www.limbsaver.com. **Price:** from £105.



IMAGE: LIMBSAVER.COM



BCY BOW STRING AND SERVING MATERIALS

A special mention to the most colourful stand at the show – BCY, bow string material producers. The guys brought with them over 70 different colour options and to quote them they “can do any colour combination you can think up”. The company does not make strings they sell material for string making and use only the first quality HMPE - SK75, SK78, SK90 and SK99 Dyneema®, Type 1000 Spectra, and Vectran. Check them out at www.bcyfibers.com.

GOLD TIP ARROWS: THE RANGE

Duncan Busby looks at history and the product range of the durable Gold Tip arrow

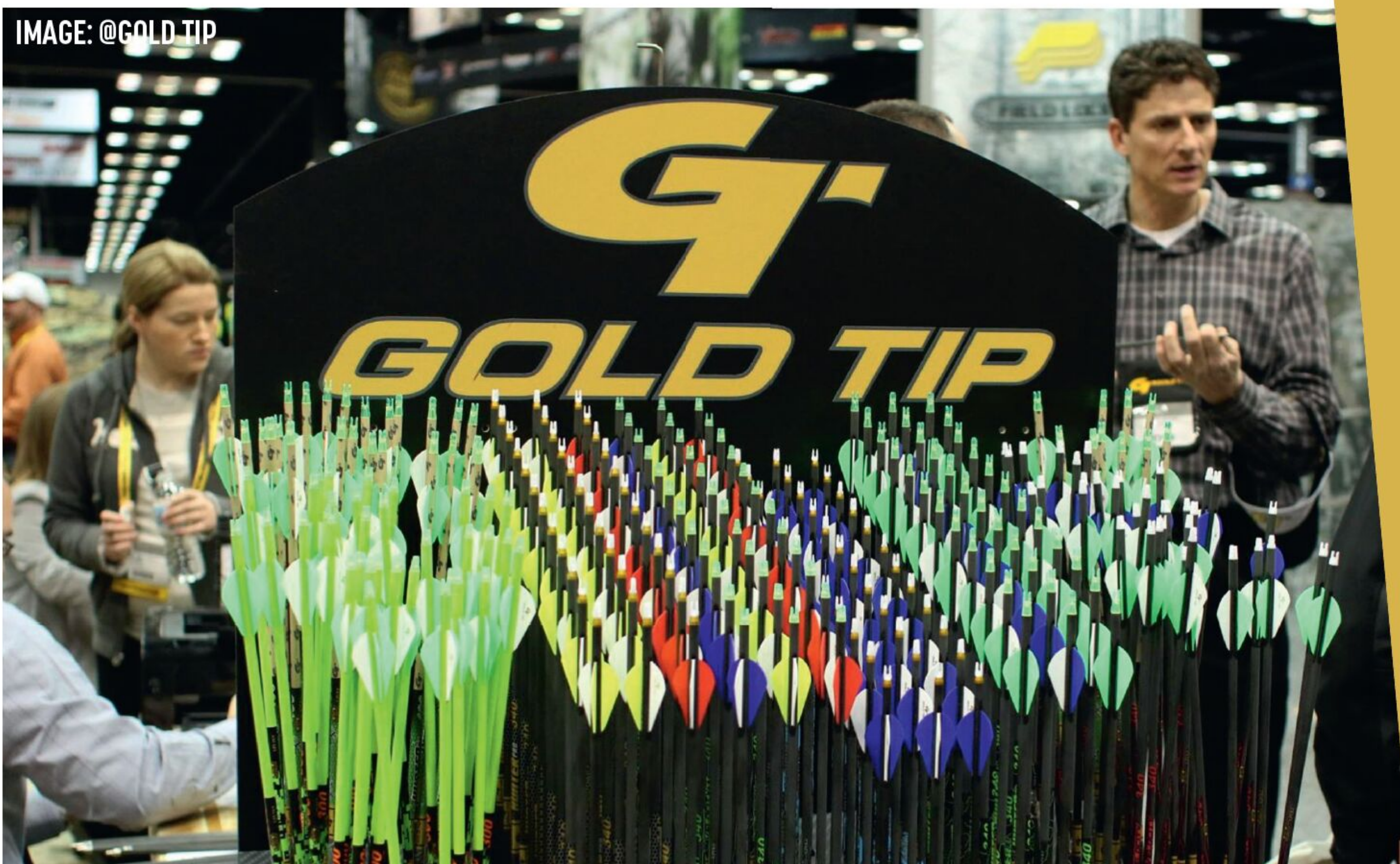
Over the last decade or so, arrow technology has advanced in leaps and bounds; more and more manufacturers are offering perfectly matched sets of arrows with ever tighter tolerances. Today archers can expect super tough shafts that slice through wind and penetrate even the toughest targets. These shafts are designed to be aerodynamic, well balanced and accurate, so with such a great choice on offer, which manufacturers stand apart from all others?

A BIT OF HISTORY

Gold Tip are recognised throughout the archery industry for making the most innovative, durable, and precise carbon arrows in the world. Founded in 1989 by Marvin Carlston, Gold Tip started out by making high-end arrow components before moving into the carbon arrow market several years later. Gold Tip has always been ahead of the game in arrow development. “What set Gold Tip apart from the competition in the early years was that it was the first company to produce a carbon arrow with an internal-fit insert,” said Jake Edson of Vista Outdoors. “That happened in 1996, and internal-fit components made Gold Tip the pioneer of modern arrow technology.”

Today Gold Tip have a whole host of innovations to their name and produce no less than forty different arrow models, alongside a truly staggering number of high-quality components. Gold Tip operates under its parent company Vista Outdoors; a worldwide leader in outdoor sports and recreation which also includes Bee Stinger stabilisers, Bushnell optics and Camelbak outdoor wear under its brand. After becoming two of the most recognisable and trusted archery names on the tournament circuit and the hunting trail, Gold Tip and Bee Stinger outgrew their manufacturing facility in 2016 and moved to a larger plant in Utah, USA. A ribbon-cutting ceremony was held but instead of using scissors, champion

IMAGE: @GOLD TIP



archer and Gold Tip National Shooting Staff Manager Tim Gillingham shot the ribbon in two with a Gold Tip arrow.

The new facility is more than 28,000 square feet square and the additional space features innovative technology that will increase production capability and produce arrows with superior fletching. Jake Edson shared his thoughts on Gold Tip's newest premises. “We put in state-of-the-art fletching machines different from the ones other arrow manufacturers use. Most notable is the ability to offer a factory four-fletch option on all of our arrows; our competitors cannot do that.”

Gold Tip's pursuit to make the industry's most consistently straight arrows never stops. Every Gold Tip arrow is manufactured from 100% pure carbon, using the finest aerospace-grade materials. This produces a stronger shaft that retains its straightness for longer, shot after shot. Each arrow is then 3-point laser sorted to assure that the entire shaft – from end, to middle, to end, meets Gold Tip's 'End to End Straightness' promise. The industry-standard

measures straightness at only one point, the centre; Gold Tip arrows go beyond this and guarantees unmatched straightness along the entire length of the shaft.

Usually, this kind of quality comes with a hefty price tag, but Gold Tip arrows have remained some of the most affordable on the market, with their compound target competition shafts coming in at less than half the price of their nearest competitors.

THE RANGE

There is really only one way to describe Gold Tip's line-up of shafts – dominant. Gold Tip shooters continually beat the competition on the tournament circuit and the arrows have become a firm favourite amongst archers around the world, including some of the biggest names in the 3D and target game including Tim Gillingham, Domagoj Buden, Kyle Douglas, Paige Pierce and World number 1 Paralympic archer Nathan Macqueen. So, what are the top picks from Gold Tip's extensive arrow range and which arrows should you be shooting?

ULTRALIGHT PRO IMAGE: @GOLD TIP



OUTDOOR TARGET

Ultralight Entrada - The Ultralight Entrada is a top pick for entry level shooters that have a need for speed. Accurate, yet forgiving, the beginner-level Ultralight Entrada is constructed from 100% carbon for unmatched durability and straightness retention. Starting from £64 per 12pk (excl. components).

Ultralight Target - The Gold Tip Ultralight is the ticket for all things outdoor archery. Whether it's 3D, Field, or Target, the Ultralight is right at home. With a wide range of spines from 300 to 700, it's so easy to match the right size to your set up. Starting from £76 per 12pk (excl. components).

Ultralight Pro - The Ultralight Pro is one of the pinnacle shafts offered by Gold Tip; a mid-diameter, consistent performer with too many titles to its name to list. Years of success for this shaft are due to its sizing, precision components, light weight and superior straightness. Starting from £120 per 12pk (excl. components).

Kinetic Pierce Tour - Suddenly the wind isn't the element it used to be. The Pierce Tour is specifically engineered for outstanding performance out in the field where long distances rule and unpredictable winds abound. This micro diameter arrow, made with Gold Tip's 100% Pure Carbon Technology, resists wind drift, and provides unmatched straightness retention to produce accurate shots that work in your favour even when the conditions are not. Starting from £180 per 12pk (excl. components).

NINE.3 MAX PRO IMAGE: @GOLD TIP



INDOOR TARGET

Nine.3 Max Plus and Pro – Nine.3 Max Plus and Pro shafts push the maximum diameter allowed for World Archery Indoor competitions. Not only are they accurate, the Nine.3 Max is super durable, withstanding the rigours of harsh target materials often used for Indoor Archery. Plus, from £97; Pro from £163 per 12pk (excl. components).

Triple X Plus and Pro – At .421" this is the largest diameter shaft in the Gold Tip line up and it's just as at home indoors as it is on the 3D range when big diameter arrows are required. The Triple X is among the only sure bets when shooting in Vegas; precise enough to shoot 900s and big and stiff enough to handle the fastest bows – anything else is a gamble. With an incredibly durable and tough .100 spine and tolerances as tight as +/- .001 with the Pro version, you get the exceptional level of straightness retention and accuracy you need to get you to the next level on the podium. Plus, from £108; Pro from £170 per 12pk (excl. components).

“GOLD TIP SHOOTERS CONTINUALLY BEAT THE COMPETITION ON THE TOURNAMENT CIRCUIT AND THE ARROWS HAVE BECOME A FIRM FAVOURITE AMONGST ARCHERS AROUND THE WORLD”

X-CUTTER PRO IMAGE: @GOLD TIP



3D SHOOTING

30X Plus and Pro - The 30X is the 3D king; these shafts are big enough and stiff enough to handle the fastest bows and keep you hitting the scoring ring when you need it the most. Built for high calibre 3D archery competitions, the 30X Plus and 30X Pro feature a .399 diameter and a stiff .200 spine to provide the line-cutting performance of a large shaft without having to sacrifice speed. Plus, from £95, Pro from £160 per 12pk (excl. components).

X-Cutter Plus and Pro - There's a reason the X-Cutter has become the most popular shaft in 3D archery and a perennial podium powerhouse. Described as a “fat shaft favourite”; its large diameter and lightweight construction give it an almost unfair advantage. In both Plus and Pro grades, the X-Cutter is unmatched in delivering durability and straightness retention for speed, accuracy and consistency shot after shot. Plus, from £74, Pro from around £150 per 12pk (excl. components).

22 Series Plus and Pro – The Series 22 has become one of the most popular lightweight 3D shafts on the circuit. At only 7.3 grains per inch the 22 Series offers higher speeds and performance for lighter draw weights or shorter draw lengths. The series 22 are WA legal so are also a great choice for indoor archers looking for a weaker arrow option. Plus, from £83, Pro from £141 per 12pk (excl. components).

TRADITIONAL CLASSIC XT IMAGE: @GOLD TIP



TRADITIONAL

Traditional Classic and XT –

Gold Tip will never forget the needs of the Traditional shooter and they offer a great choice with the Classic and Classic XT arrow range. With a striking wood grain appearance, but with the performance and durability of its all-carbon construction, the Classic is engineered to deliver toughness and accuracy you won't find in a wooden shaft. The heavyweight, small diameter shafts come equipped with stainless steel inserts and reinforced ballistic collars and are available in a range of diameters and spines - it's the perfect choice for any traditional archer demanding hard-hitting kinetic energy Classic and XT, from £90 per 12pk (excl. components).

COMPONENTS

Even the best arrows in the world will not perform to their full potential without the quality components; Gold Tip prides itself in providing archers with precision components for all applications and configurations. With a huge range of nock systems, bushings, vanes and assorted inserts and glue-in point styles; Gold Tip components are specifically engineered to tolerances needed for ultimate accuracy.

Gold Tip's innovative FACT weight system deserves a special mention; it allows you to quickly and easily add more weight to your inserts or glue-in points using weighted screws. These can be fitted before your inserts or points are installed or after with the use of the extended FACT weight wrench. This clever feature allows you to customise your arrow spine and Front-Of-Centre to where you need it, so you can reach new levels of accuracy.

Gold Tip products are supported by a network of knowledgeable and friendly employees, dealers, and distributors. As a result, they have long become an arrow company that's loved and trusted by archers worldwide. There's also a wealth of knowledge available at your fingertips on Gold Tip's website, where you can learn everything from how to set up your arrows, to tuning and performance tips. So, if you're wondering how to get the best out of your arrows, head on over and take a look at 'Gold Tip's Arrow University' on their website.

In September 2023 Gold Tip proudly announced the launch of a new podcast hosted by World Champion professional archer Tim Gillingham. Titled 'Archery Ops with Tim Gillingham', the podcast is devoted to all things archery and is available now on all streaming services including Spotify, Apple and You Tube. It's well worth a listen if you want to keep up with the very latest news from the world of Gold Tip, and includes some great insights into the range of shafts available, as well as how the best in the game set-up and tune their kit.

Gold Tip already offer a full line of premium carbon target, field, 3D and hunting arrows, as well as youth arrows and crossbow bolts, but the minds at Gold Tip never stop which means relentless innovation never stops. So, what does the future hold for Gold Tip? We'll leave the final word to Jake Edson at Vista Outdoors who reveals that "Gold Tip's engineers will be experimenting with new materials, components and technologies - I'd say that's reason enough to remain on the edge of your seat".

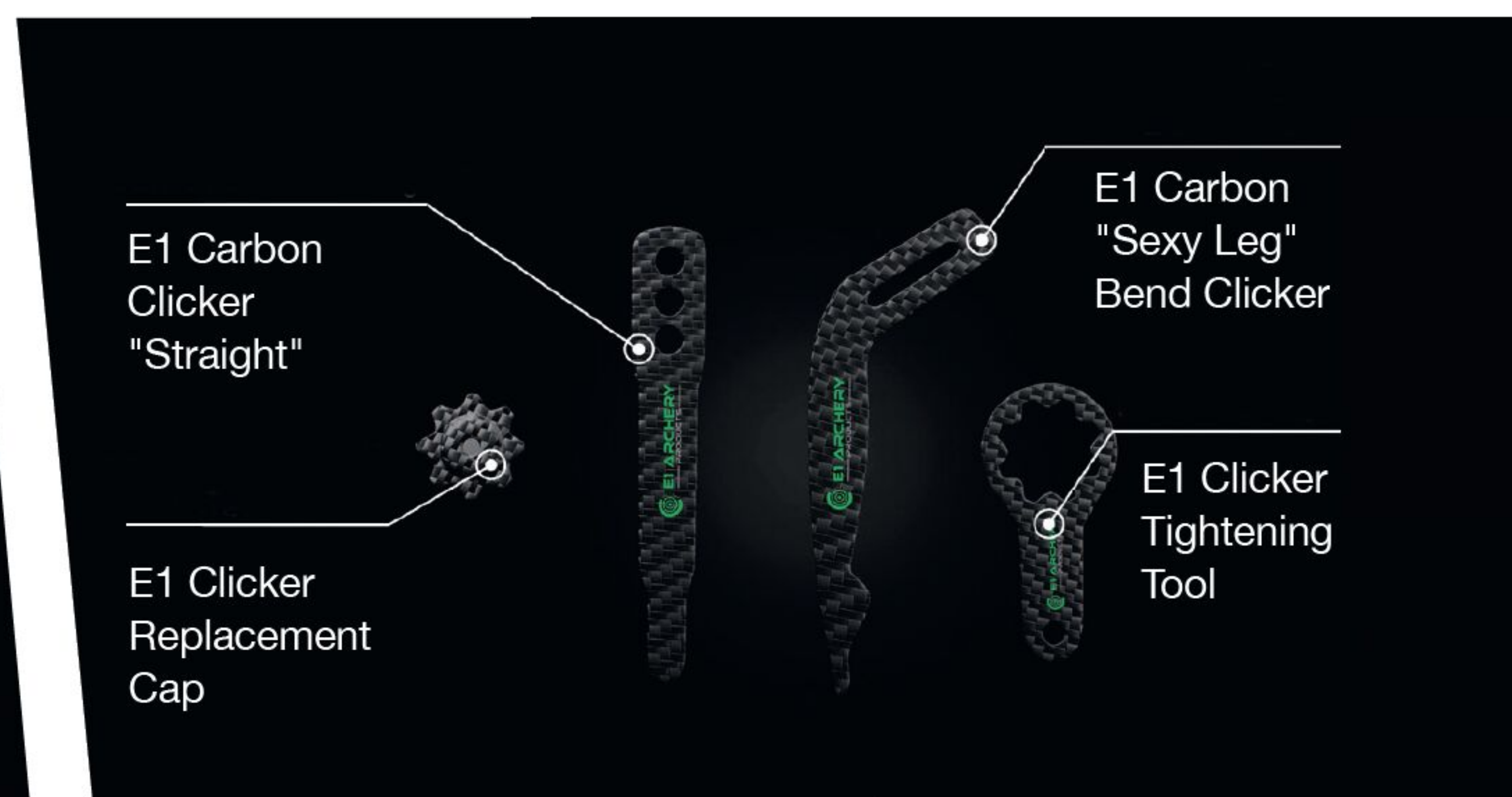
For more information, updates and archery academy visit: www.goldtip.com 📍

IMAGE: @GOLD TIP



***Did You Know?** World Champion and professional archer Levi Morgan has an arrow named after him - Gold Tip's Name the Game Levi Morgan XT Hunter shafts are uniquely decorated and a portion of the proceeds from the sales of every NTG shaft will go to charity.*

"Gold Tip are my choice of arrow – I use the Kinetic Pierce Tour shafts outdoors and the Nine.3 Max Pro's for indoor WA events. Every set of arrows I've built have been easy to set up and tune. So far, I've not had a single breakage, and the original dozen I set-up a year ago are just as accurate now as the day they were built. Gold Tip shafts and components really do live up to their reputation as the toughest and most consistent available and you won't find any other premium arrows this affordable."
Duncan Busby, Gold Tip Pro Shooter



E1 CARBON CLICKER BY ELIZA ARCHERY



Bow: Is this the most durable and hassle-free clicker?

Have you ever been frustrated by the unwanted accidental shifts of the clicker during loading, shooting or whilst your bow is in transit? Your problems may have just been solved. The E1 Carbon clicker, the latest product developed by Australia's Olympic bronze medallist Alec Potts at Eliza Archery, promises to improve clicker fixture and stability.

Strength tests conducted by Eliza Archery have shown that E1 requires three times more force/effort to move the clicker from its original fixed position when compared to other top clickers on the market. The E1 clicker dispenses with rubber washers; instead, the locking star and the rest of the body of the clicker are designed to interlock firmly like pieces of a jigsaw puzzle, whereas

the rubber washers, typically sandwiched in between the parts, tended to wear and create that unwanted bit of space. In addition, this carbon-on-carbon design promises to solve the issue of arrow wear.

The E1 clicker comes in three models: "Straight", "Sexy Leg" Bend, and the "Sexy Leg" Ultra Soft. The standout model is, of course, the "Sexy Leg" Bend, designed to resemble the curves of an actual leg. Besides the striking design solution, the main reason for creating this extra forward bend "at knee", or the extra protrusion, is so that the length of the clicker plate always maintains its angle, and stays vertical in relation to the arrow, no matter how far up or down the bar it is fixed.

Another notable feature is the clicker sound. The E1 produces a distinctive and "crisp" click, eliminating that annoying

buzzing. The end of the straight clicker has been widened to eliminate "false clicks" with bulge style arrow points. The Ultra Soft model produces a softer sound for those who prefer it, and is recommended for archers who set their plunger to the softest pressure settings, or for those who are training for the clicker "feel".

All models can be purchased individually or as a bundle of three. The single unit will come with a locking star and the tightening tool, the bundle with three clicker replacement caps for each model and a tightening tool. Available in RH and LH, in black only. ●

Head down to @ Eliza Archery Youtube channel to watch the strength test video.

Available now at most UK dealers or at www.elizaarchery.com

TRADITIONAL NURISTANI VILLAGE SHOWING WOODEN CONSTRUCTION TECHNIQUES IMAGE: JONATHAN RIDER



"ONLY MEN AND BOYS ARE ALLOWED TO SHOOT... EACH TEAM COMPRISES 12 ARCHERS OF MIXED AGES FROM 10 TO 80+."

A LONG SHOT IN THE HINDU KUSH: ARCHERY IN NURISTAN

Jonathan Rider, a Fellow of the Royal Geographical Society, takes you on a journey

INTRODUCTION

In a remote province of Afghanistan, an archery tournament takes place every year. Nuristan (the land of light) was the last part of the country to be converted to Islam in 1896. For hundreds if not thousands of years, Kafiristan (the land of the unbelievers), as it was previously known, has been a fiercely independent region, repelling the advances of invading forces from Alexander the Great and Timur Shah, to the Soviets, and the recent US-led international coalition. Set amidst rugged mountains and thick forests, it is a harsh and isolated region, even by the standards of Afghanistan's punishing terrain.

As a result, the region developed a distinct religion and culture, harking back to its early Indo-Iranian roots. Nuristan is famous for its intricate wood carving techniques and architecture, for its panoply of gods and unique linguistic groups. These are generally well documented. Less well known is the practice of archery, which still forms a vibrant part of Nuristani culture to this day.

Nuristan has remained more or less inaccessible for much of the last hundred years, proving few opportunities for anthropologists and archaeologists to conduct research. Though there have been some notable scholars working on the region, the focus has (quite understandably)

generally been architectural or linguistic. Archery has received virtually no attention.

The author travelled to Nuristan to take part in the archery tournament and to document the equipment and practices associated with the sport. This short article aims to take the first step in filling the void, and to provoke further research and discussion.

THE ARCHERY TOURNAMENT

Following the collapse of the previous regime in 2021, Nuristan is today under the control of the Taliban, which has already started to ban cultural practices they deem un-Islamic across the country, such as music and dancing. In Nuristan, the carving



(LEFT) TYPICAL POSTURE AT FULL DRAW, (RIGHT) TYPICAL FOLLOW-THROUGH WITH BOW TWISTED TOWARDS THE TARGET IMAGES: JONATHAN RIDER

IMAGES: JONATHAN RIDER



LEATHER ARMGUARD



WOODEN ARMGUARD

of human figures – once widely practised – is now forbidden. In spite of these curbs, archery is still permitted. Many of the villages have a dedicated range set up for the sport, consisting of two small targets – usually a stick the size of a cricket stump – with raised earthen backstops set 100 meters apart. Archers shoot from one target to the other and then switch ends. Only men and boys are allowed to shoot.

For as long as anyone can remember, archery tournaments take place every year in some of the larger villages, drawing teams from the neighbouring areas. With the Taliban in control, there has been an effective cessation of hostilities, enabling considerable freedom of movement. In 2022, an archery tournament was held in the village of Bargromatal, drawing eighteen teams from across the province. Each team comprises twelve archers of mixed ages, anything from 10 to 80 or more. Teams are required to pay a small fee to enter the competition, with the prize money awarded to the winning team. The format is a simple ‘knock-out’ competition, with the winning teams progressing through quarter and semi-finals to the final itself. The range was set out on the edge of the village alongside a small river. At either end, large backstops made from sandbags and piled earth suggested that the range had long been in use. Both teams congregate at one end of the range. One archer at a time steps forward to shoot at the target at the other end of the range. There is no firing line to speak of, but each archer takes his shot from roughly the same spot. The other archers from both teams

crowd to the sides, behind and in front of the archer. There is silence for the shot, but much ribaldry and heckling before and after the shot is taken. The atmosphere is competitive but jovial.

Once the shot has been released, the archer runs or walks to where his arrow has landed, from where he watches as the other archers shoot towards him. Gradually, the number of people standing at the target end of the range is greater than the number standing at the firing point. The last person to release his arrow is effectively firing into a crowd of 23 people. As the arrow flies, those standing nearby leap out of the way, crowding back in again after it lands. Close shots are greeted with great cheers, whistling and dancing, bad shots with jeers. Teammates help each other by crouching before the target and flashing a small mirror or hat to draw attention to it, only dodging out of the way at the very last minute. Death and injury are not unknown. The closest shot wins the round. Occasionally, an arrow strikes the target, which automatically wins the round. The two teams then shoot back towards the original target following the same format. A match therefore comprises two shots per archer, one from each end of the range. Some of the competitors arrived early in the morning to practise, but for many, these two shots were the only ones they fired all day. That the majority of arrows landed within a span of two meters either side of the target at this range is testament to the general skill of the archers. Throughout the competition, children run about between the targets whilst

arrows fly overhead. Spectators line the mountainside, sitting in the shade of trees or large boulders.

SHOOTING STYLE

While there is some variation in technique, many archers adopt a broadly consistent shooting style. Standing side on to the target, the weight is placed on the left foot (assuming a right-handed archer).

The arrow is placed on the left-hand side of the bow on an extended or crooked finger pointing towards the target. The bowhand thumb is invariably placed upright and flat against the belly of the bow. With head hunched low, the string is drawn to the chest or low jaw. Elbows are both raised and dropped - more often the latter.

A Mediterranean release is used exclusively, with one finger above and two fingers below the arrow. On release, the bow is often twisted so that the string ends up facing the target. This is thought to provide additional length to the shot. Many archers step forward into the shot after release, following through with their chests and allowing the bow to drop to the side.

EQUIPMENT: BOWS

The bows were made entirely of wood, conforming to a standardised design. Carved from a bough stave, typically two inches in diameter, the bows were straight-limbed with no recurve. Some of the bows were slightly stiff in the mid-section, while others bent full compass. The back of the bow is rounded, following the outer circumference of the original



HAND-STITCHED SHOOTING GLOVE



LEATHER FINGER TABS

bough. The belly is flat, often showing streaks of darker core pith down the centre. The widest part of the bow is the handle, which is approximately 1.25-1.5 inches, with a maximum thickness of approximately one inch. The limbs taper in thickness rather than width, culminating in wide flat tips, measuring $\frac{1}{4}$ inch by $\frac{3}{4}$ inch. Simple nocks are cut into the sides. There are no grips, though many of the bows display markings and patterns drawn in ink to denote hand placement. Occasionally, bows are decorated with small floral images and patterns using a biro or permanent marker pen. Curiously, none of these images or designs conform to the beautiful geometric wood carving vernacular the region is famous for. Bow length varies according to the height of the archer though rarely exceeds 60 inches. When braced, bows typically stand just above the archer's shoulder height, and draw anywhere between 30lbs and 50lbs. The bows are intended to have a smooth, even tiller, not dissimilar to a traditional English longbow. However, many bows are poorly tillered with one limb weaker than the other, or with alarming hinges. Damaged bows are repaired and reinforced by wrapping string around the affected area. Bows are unstrung when not in use.

Bow wood is harvested from a species of white wood akin to willow. As a preference, wood is cut at altitude, where slow growth creates tighter growth rings, and therefore stronger, faster and more durable bows. The bark is removed and the timber laid to dry before it is worked into a bow. The bows are made using an adze (a tool

“DRY FIRING BOWS AT QUARTER DRAW IS A COMMON WAY TO TEST THE BOW...”

with an arched blade) for the preliminary roughing, followed by a block plane for refining the shape. The final tiller is achieved using a knife, drawn swiftly back and forth to remove thin slivers of wood like a spoke shave. No clamps or vices are used to hold the wood. Instead, the bowyer squats on top of the wood to hold it in place for the plane work, and in this manner can reduce a stave into a fully tillered bow in less than an hour. Few bows are sanded, relying instead on the finesse of the finishing cuts to create a smooth surface finish. Bows can be made by anyone with the time, knowledge and inclination, though there are those who make bows for a small fee. These are usually drawn from the historical artisan underclass, the bari, who continue to work in the manufacturing and carpentry industries today.

The quality of a bow may be judged by the tension of the string at brace height. Dry firing a bow at quarter draw is a common way to test it. Though there are some who equate low brace height with faster arrow speed, bows are generally braced high for the length of the bows, putting great strain on the wood at full draw. String-follow varies considerably depending on the quality and age of the bow. Whilst in Nuristan, the author commissioned a bow 55 inches in length.

EQUIPMENT: ARROWS

The arrows are made of bamboo, with a typical diameter of $\frac{3}{8}$ inch. Arrow length varies significantly, and seems to bear little relationship to the archer. Arrows are unfletched. Shallow nocks are cut into the arrow, often just above a node to prevent splitting. Sticky tape is used to reinforce nocks and the foreshaft. The arrowheads are locally made, and consist of a large point, similar to a needle bodkin, with a narrow tang designed to slot into the hollow centre of the bamboo shaft. At the base of the point, just before the tang, the arrowhead flares into a narrow circular skirt which prevents the head splitting the shaft on impact. There is no variety in the design of arrowheads, which are made exclusively by the bari. In flight, some arrows fly straight and true, while others flap and spin uncontrollably. There seems to be little intentional matching of arrow length and spine with the weight of the arrowhead.

EQUIPMENT: SUNDRY

Traditional bow strings were reportedly made of goats' hair, though today they are made of a cheap synthetic material straight off a reel. An assortment of knots is used to attach the string at both ends. There is no serving on the string, nor nocking

IMAGES: JONATHAN RIDER



LOCALLY MADE ARROWHEADS ARE SIMILAR TO A NEEDLE BODKIN



ARROWHEAD MOUNTED INTO THE BAMBOO SHAFT



ARROWS ARE UNFLETCHED; STICKY TAPE REINFORCES THE NOCKS

points, nor any kind of sighting hole. Many archers wear bracers to protect the forearm. These range from a simple scarf wound around the arm, to a stick of wood strapped in place with elasticated fabric. Shooting gloves are common, following traditional patterns found in the UK and elsewhere. They are handmade using thick synthetic cloth. Shooting tabs are not used.

STONEBOWS

Children continue to use stone bows for recreation, though none was observed in action during the field visit. On request a bowmaker demonstrated the technique. A double bowstring is attached to the bow (which does not differ from the bows pictured). The strings are held apart by a single notched stick around 3 inches in length, placed a few inches below the top nock. A leather pouch is sewn between the strings. A small stone is placed in the pouch, which is pinched between the fingers. The trick to shooting a stone bow is to position the bow hand well below the centre to ensure the stone does not hit it. With not archer's paradox to contend with, the stone naturally wants to pass through the centre of the bow. The bow is half drawn, and upon release, sharply twisted to the side facilitating the safe passage of the stone around the bow.

GENERAL OBSERVATIONS

The absence of literature makes it difficult to situate Nuristani archery within a broader historical context. Where it came from and what influenced its design can only be a matter of conjecture at this point.

We can be reasonably confident that the form of archery practised today has remained broadly unchanged for at least 120 years, if not longer. George Robertson wrote an account of Kafiristan based on his experiences living there in 1890/91. In Kafirs of the Hindu Kush he provides one of the only reliable written accounts of the region before it converted to Islam. The book contains some brief references to archery, which was still in martial use at the time. There are even a handful of drawings depicting archers, based on photographs he took during his stay. With the exception of clothing very little has changed – both the equipment and shooting style seem the same.

Inter-village warfare was endemic prior to conversion to Islam, with village raids and ambushes a rite of passage for young men. Such skirmishes would often take place on foot in confined spaces, negating the need for artillery-style longbows of the English pattern, or the powerful horse-bows of the steppes. Nuristanis certainly had access to the materials needed for composite

bows – such as long horn (from ibex), bone and sinew – but the simpler wooden self-bow design seems to have endured. It seems unlikely that the region's isolated position alone inhibited the spread of new technologies, as composite bows would have accompanied many of the invading forces and occupying armies of neighbouring areas for hundreds of years, so probably would have been known to Nuristanis. The idea that they were not technically capable of making such bows is negated by the region's extraordinarily sophisticated wood and metal artefacts.

Thus it is quite possible that the style of bow that emerged here was simply a product of expedience. They are highly functional and superbly adapted to the environment. The materials are cheap and easy to source, the design easy to replicate so that damaged or broken bows can quickly be replaced. The arrows are tough, able to withstand impact on rocks and hard ground without shattering. Fletched arrows would quickly shred to pieces in such conditions.

It would be interesting and informative to compare Nuristani bows with examples from neighbouring regions. Such a project would surely throw light on Nuristani culture. The notes provided here are intended as a tentative first step towards such research. ☉

PAPER LOVES TREES

European forests, which provide wood for making paper, paper packaging and many other products, have been growing by 1,500 football pitches every day!

Food and Agriculture Organisation of the United Nations (FAO),
2005 - 2020. European Forests: EU27+ Norway, Switzerland and the UK.



Discover the story of paper

www.lovepaper.org

Scan for paper facts, activities,
blogs and much more!



The World's Most UNRIVALED Bowstrings

Introducing the all-new Recurve + Bowstrings!
Engineered Specifically with Recurve Archers in Mind!

See what the pros are talking about!

- 🎯 Made with our unique patented RCX 1200 material.
- 🎯 Perfect balance of elasticity and stability without the worry of string creep.
- 🎯 SenseTek Suppression loops to enhance a soft shot feel and protect limb tips.
- 🎯 Comes with your ability to customize serving colors, strand count, and center serving size.



www.gasbowstrings.com
info@gasbowstrings.com

WHY KOREANS DO IT BETTER



The Hyundai Motor Group have been a longstanding supporter of the Korean Archery Association and its athletes, the world's most successful modern archery

giants. The 'shin gung', or bow masters, as the Korean Team is commonly referred to domestically, amongst other things, boast a flawless record of nine consecutive Team Olympic golds, earned by the Korean Female

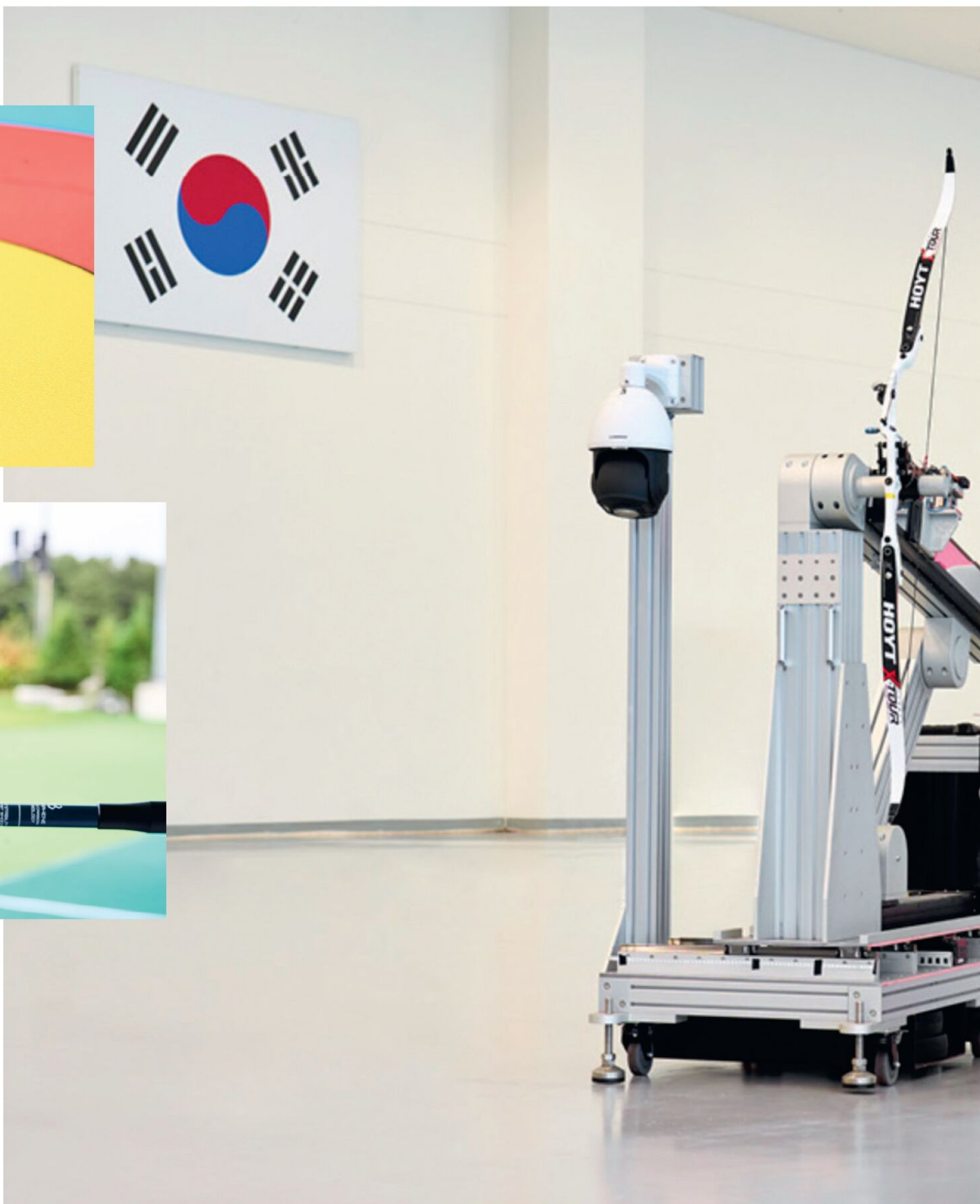
team. Hyundai have been supporting Team Korea since 1985, the company's longest-running sponsorship of a single sport organisation in South Korea. Here are some of the weird and wonderful things they have done.

IMAGES – HYUNDAIMOTORGROUP.COM



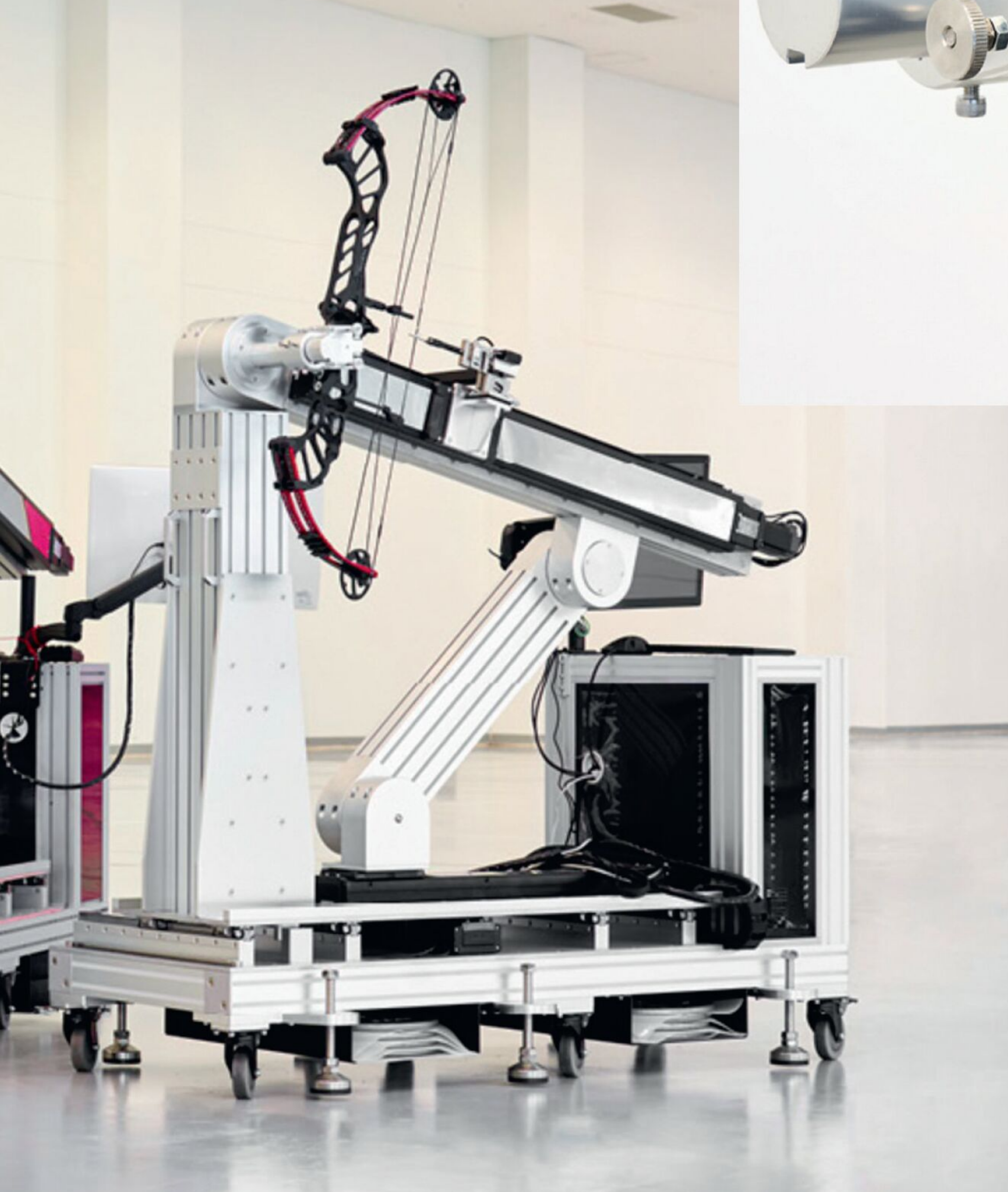
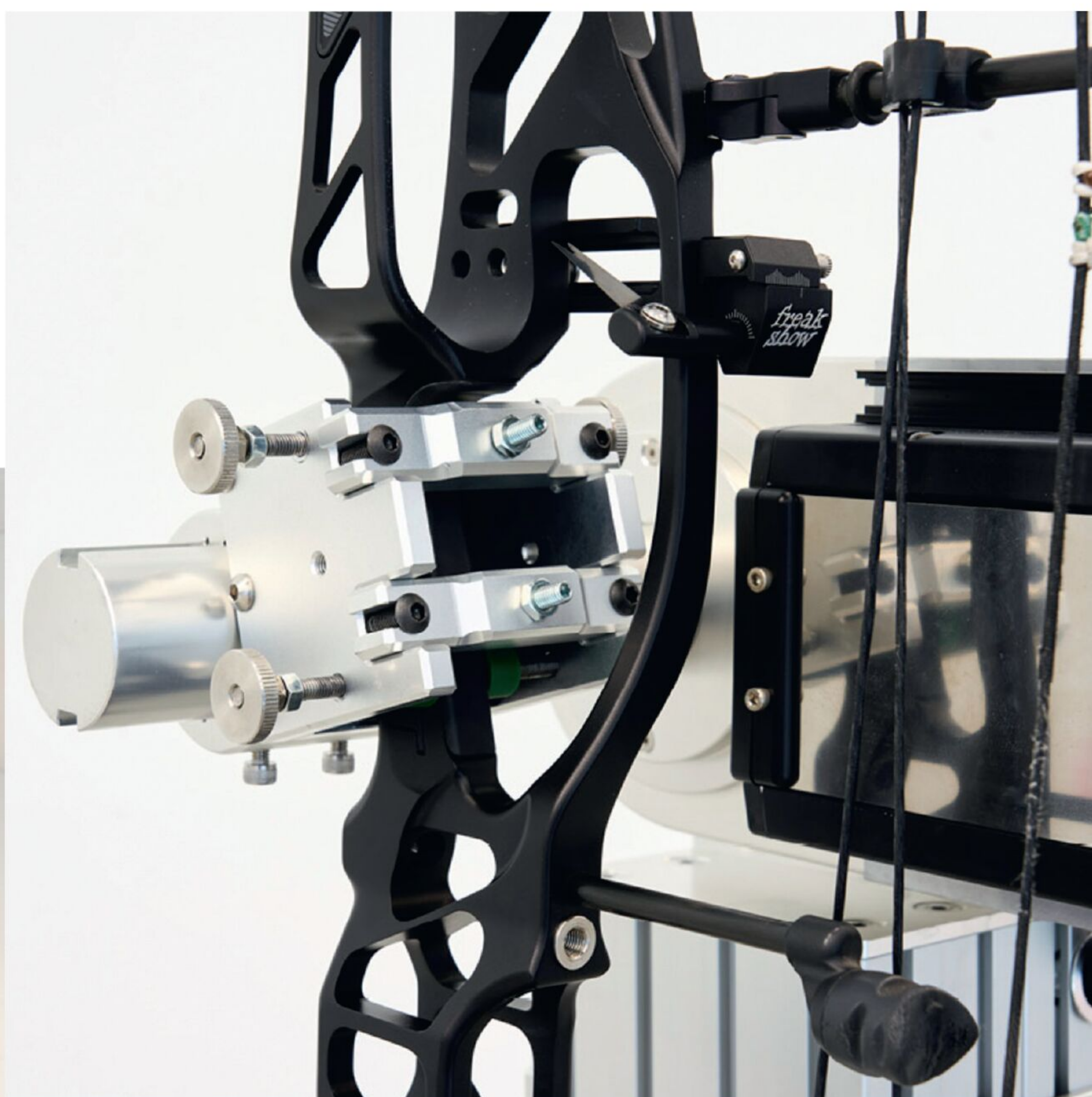
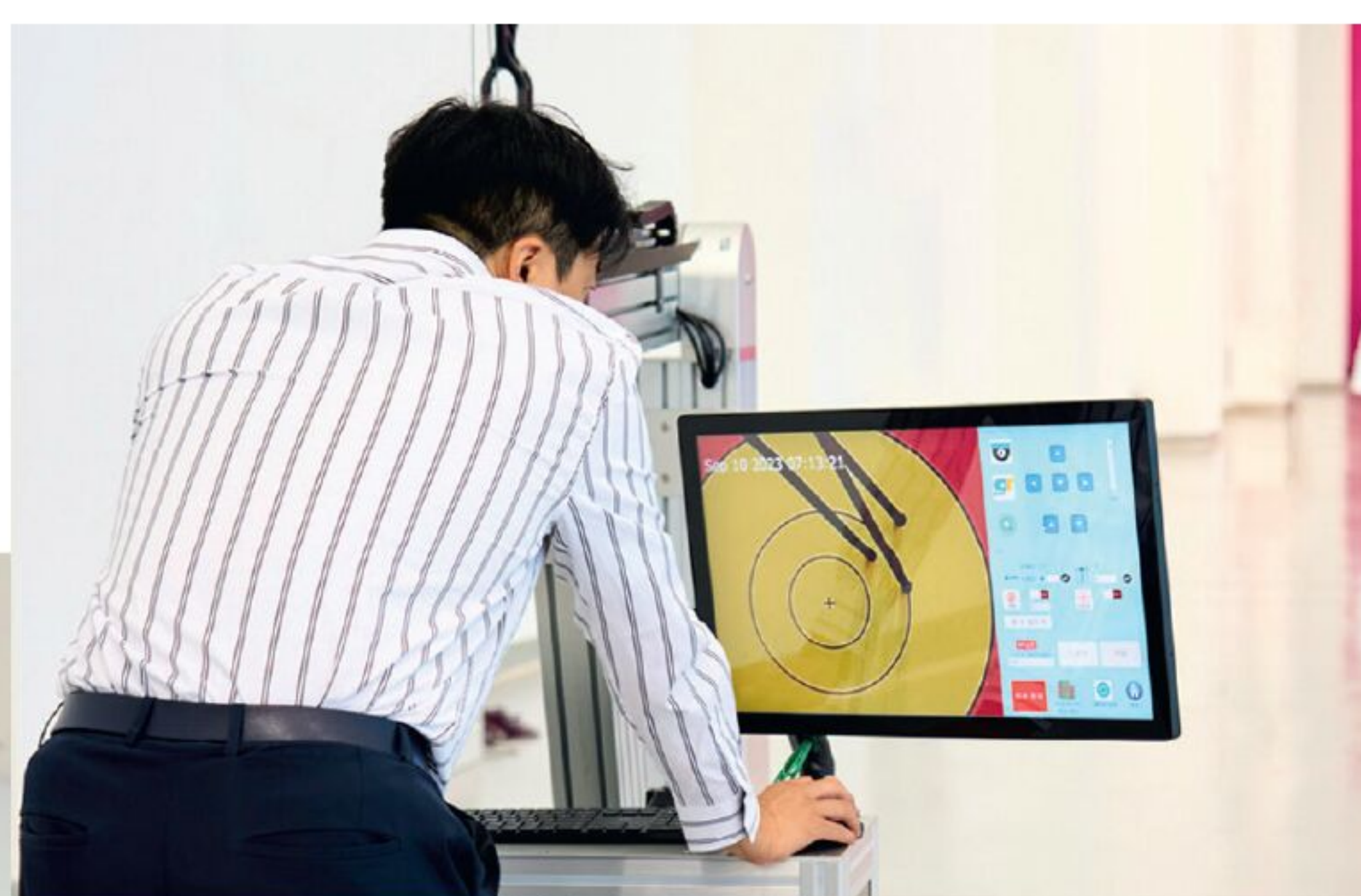
Custom Equipment and 3D Printing

The Hyundai Motor Group creates personalised 3D printed recurve and compound bow grips, as well as the individual peep sights.





IMAGES – HYUNDAIMOTORGROUP.COM



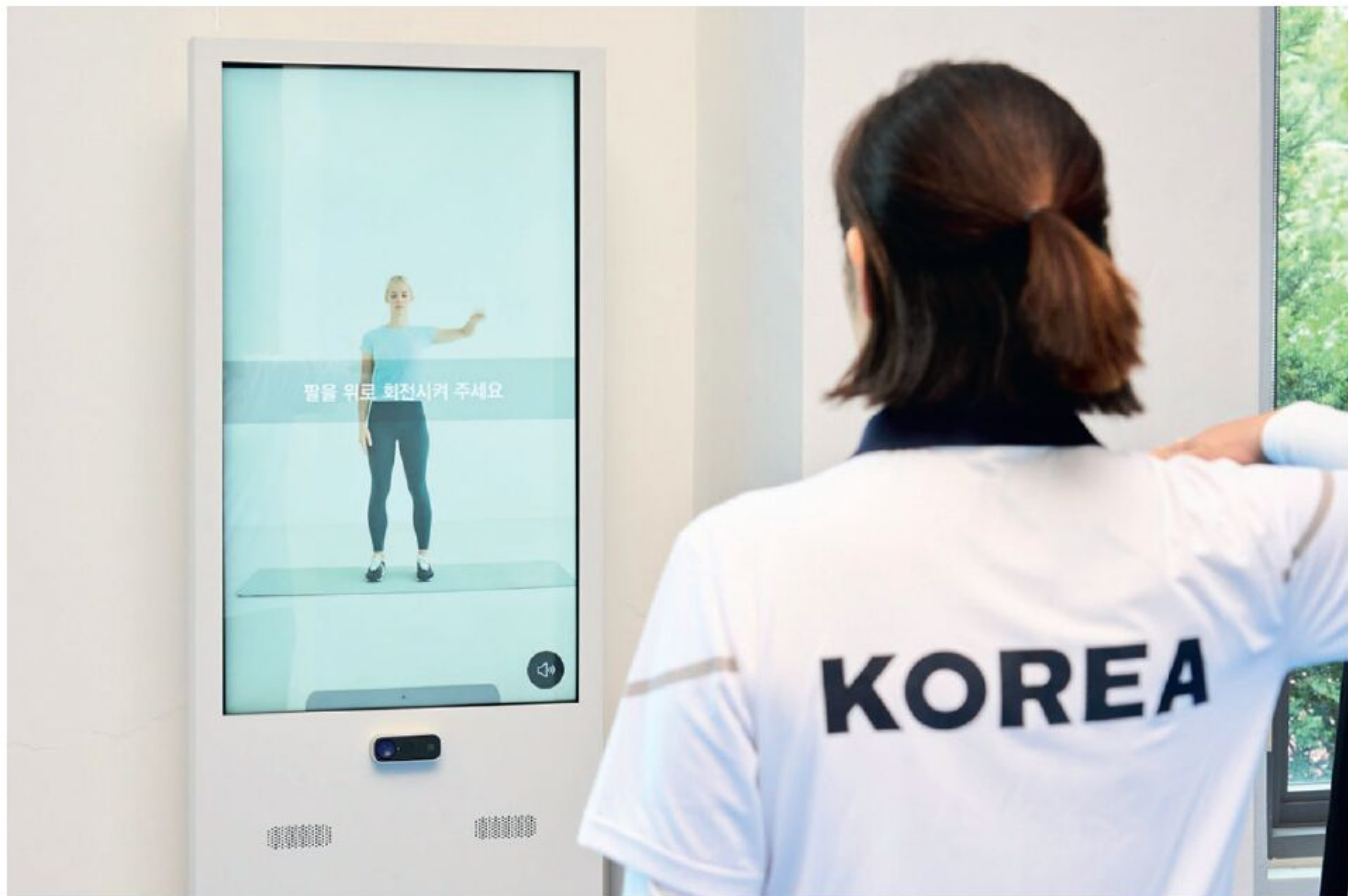
Compound Precision Machine

Precision machines for recurve were used in preparation for Tokyo 2020. This precision machine is the latest 2023 Hyundai development, made specifically to match the rise in the KAA's investment in compound archery development and the increased international tournament participation of the Korean compound archers. While the recurve machine could consistently shoot the same spot at 70m, allowing for selection of the most superior arrow shafts for the Olympic team, this compound machine also has a precision actuator that can fire arrows at angles, and at various levels of intensity. It was used to select the best arrows for the Korean compound archers in the 2023 Hangzhou Asian Games, where the team clinched three silver and two bronze medals.



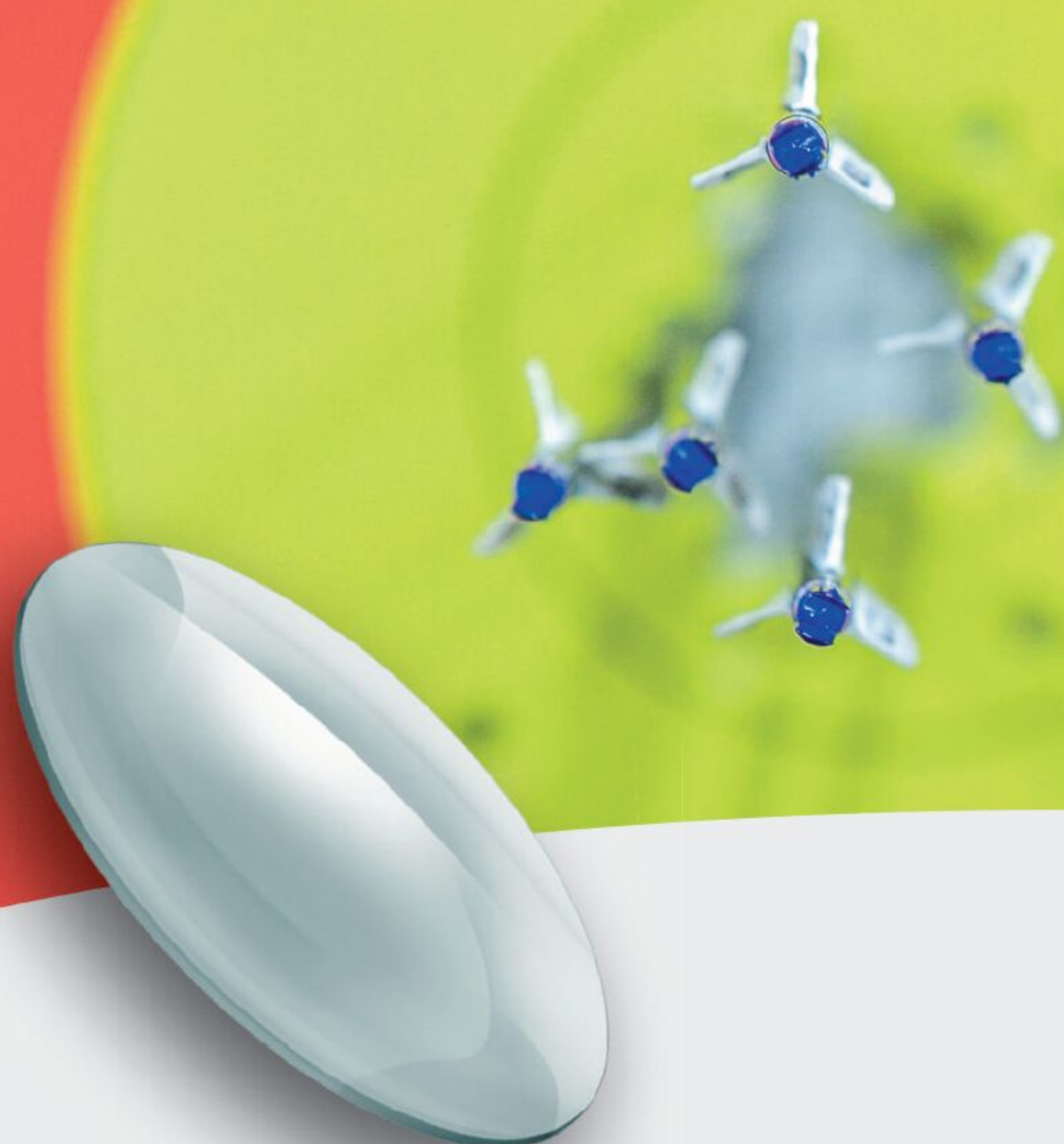
Non-Contact Joint Tracking System for Injury Prevention

The novel Non-Contact Joint Tracking System for Injury Prevention is one of the latest sophisticated technologies designed to assess the athlete's physical health. The system assesses the individual athlete's movements in various poses to recognise the minutest discrepancies; for example, it can determine slight differences in joint mobility or position that may be undesirable or uncharacteristic in that person, picking up any less-than-optimal condition of the joint or muscle. The non-contact technology is also invaluable in that it helps store the measurements for later comparison, tracking development and contributing to future studies in injury prevention. Athletes are of course referred to a relevant medical professional if abnormalities are discovered. 🎯



IMAGES – HYUNDAIMOTORGROUP.COM

ARE YOU SEEING WHAT THE PROS SEE?



IR Perfectium™

Feather
VISION™

Whether you're a 3D archer or outdoor shooter the game will never be the same.

928-775-5032

Support@FeatherVision.com

2781 N. Valley View Drive, Prescott Valley, AZ 86314



BITZ KNOB

Precision Vane Spacing Receiver

The Bitz Knob provides exact vane spacing every time regardless of your desired configuration. The Bitz Knob also features positive nock engagement for a more consistent nock fit on hunting or target nocks. Upgrade your Bitz today and experience a whole new level of precision fletching!



All three vane indexing options on the Bitz Knob match the original. (120°, 90°, & 75°x105°).

Bitz Knob ensures perfect vane spacing!

www.arizonaarchery.com



NS-G VS NS-XP



Sophie Meering looks at which of the WiaWis wood limbs will fare better

THE FACTS

When it comes to limbs, usually it is a matter of personal preference. No two people shoot the same, and so no two people will necessarily be suited for the same limbs, especially those in the higher price range. WiaWis have produced world-class equipment for many years now, and the new NS-XP limbs will likely be no exception.

The NS-Graphene Wood limbs are the predecessor to the NS-XP Wood limbs; both models are also available in foam. I personally prefer the feel of wood, so I will compare those. Note: WiaWis have confirmed they will not discontinue the NS-G limbs for the time being, and the NS-XPs will be available alongside the former model.

Both limbs are made with Graphene Nano Carbon Tech, available in short, medium, and long, and 28 to 48 lbs poundage range, measured at 2lb increments. They are wood core with High Modulus Carbon, but the new NS-XPs have the “Advanced” High Modulus Carbon material.

The 2024 limbs also have a special infrared coating to block infrared rays and thus resist rises in temperature. This is an advantage to anyone who shoots in hot climates (which these days can even include an English summer) where the bow may be in direct sunlight for a prolonged period of time.

THE EXPERIENCE

Both sets of limbs have a very smooth draw to them at my draw length. However, some archers prefer to ‘feel’ a shot more and have the feedback, some prefer a ‘dead’ feeling at the end of the shot. The NS-G limbs are smooth throughout the shot, and paired with the ATF-DX riser they give the shot a ‘dead’ feeling, which I enjoy. This combination provides the least amount of vibration I have ever felt; obviously my stabilisers do their job and give a good swing, but the bow itself doesn’t jump or buzz when shot with these limbs, whereas the NS-XP limbs do have a slight buzz. However, they feel less stiff when drawn.

I have the NS-XP limbs set at 1lb heavier and they feel lighter and smoother, until release. The NS-Gs are ever so slightly faster than the NS-XP limbs at my draw length (26.75”). The difference in smoothness comes from the WiaWis applying strain distribution, improving both strength and stability. This has been achieved by analysing the correlation between limb bending distribution and speed.

I feel sometimes the NS-G limbs can be a bit of a battle to shoot with at my draw length and poundage, but the NS-XP limbs are lighter and are less stiff, which makes for an easier shot execution.

During practice I’ve been able to shoot a few personal bests with the NS-XPs, a 590 Portsmouth round, 579 WA18, and a recent high of 322 at 70m in less-than-ideal weather conditions. I have a feeling the limbs will be a great item to be shooting, and knowing that the NS-G limbs perform incredibly well, I’m excited to see what the NS-XPs can do after such a successful year of the MXT-XP limbs! 🎯



"I HAVE A FEELING THE LIMBS WILL BE A GREAT ITEM TO BE SHOOTING, AND KNOWING THAT THE NS-G LIMBS PERFORM INCREDIBLY WELL, I'M EXCITED TO SEE WHAT THE NS-XPS CAN DO AFTER SUCH A SUCCESSFUL YEAR OF THE MXT-XP LIMBS!"

WIN & WIN WIAWIS NS-G WOOD RECURVE LIMBS



WIN & WIN WIAWIS NS-XP WOOD RECURVE LIMBS



TOP FIELD ARCHERY TIPS FOR COLD WEATHER SHOOTING

Rob Jones share his top tips on how not to freeze during winter practice

If you struggle with the cold – whether it's cold hands, cold feet, or cold everything – shooting's not much fun, or at least

less fun than on a warm summer's day. But with a little strategic preparation, winter weather in the woods can be made a lot less off-putting. Myself, I'm no fair-weather archer. I've shot in all

sorts of conditions, including heavy snow. The following tips are based on the personal experience of one yet to lose a finger or toe to frostbite. I hope they are helpful.



TIP 1 – HANDS

Hands and feet are the first things to get cold very quickly in poor weather. It gets uncomfortable, and sometimes difficult, to hold the bow or draw the string when the hands are cold. One quick win are hand warmers. I'm not talking about gloves or mittens - that comes later. I'm talking about disposable or rechargeable hand warmers. Disposable ones last for 6 to 12 hours, and you can pick those up quite cheaply - some brands retail at about £20 for a set of 12 pairs. I carry a couple of packs in my coaching gear anytime I'm out walking in autumn and winter. Reusable ones usually utilise some form of fuel, like charcoal sticks or lighter fuel. The USB-rechargeable electrical type is also a popular option. These often have multiple settings, and some allow for individual heat regulation.



SEALSKINZ WATERPROOF SOCKS IMAGE - THEHATT.CO.UK

TIP 2 – FEET AND FOOTWEAR

Footwear - I am not a fan of Wellington boots. As insulators good water-resistant walking boots and a pair of good socks are more comfortable and more effective, especially if you have to be on your feet all day. A good pair of boots will keep your feet dry and will also help traverse difficult terrain. I use waterproof Sealskinz socks, which are expensive (£20-40), but they keep my feet dry even if my boots are soaked through. If you are using Wellingtons, then I recommend you invest in the

thick Wellington boot socks.

An option is to add gaiters to protect your boots and lower legs from brambles and add an extra layer for warmth. I've known friends to wear walking crampons on some field archery shoots because the ground has been so slippery; simple crampons or extra grips on the bottom of the boots are invaluable for climbing muddy slopes. Actually, it gives the wearer a decided advantage over some of the courses I have shot at in winter.



TIP 3 – GLOVES AND MITTENS

There are countless options for gloves and mittens. There are purpose-made cold weather archery shooting gloves available; however, if you shoot using a finger tab, fingerless gloves allow fine dexterity while keeping the hands warm. Over the years I have found fleece ones work best. The nature of archery shoots makes convertible fingerless gloves/mittens a great option, and you can have a disposable hand warmer in the mitten part to keep your hands warm while waiting or walking to collect the arrows. Also consider long gloves which cover the wrists, as keeping the wrists warm will contribute noticeably to hand warmth.

**TRINSULATE MITTEN-GLOVES –
BREATHABLE AND WARM**
IMAGE – COOPERSOFTORTFORD.CO.UK



MERINO WOOL THERMAL LEGGINGS - BASE LAYER IMAGE – ICEBREAKER.COM

TIP 4 – WEARING LAYERS

It has long been understood that multiple layers are more advantageous than a single layer of the same thickness, though today specialist padded clothing almost but not quite obviates that need. A thin layer next to the skin is advisable even with the most sophisticated outer garment. Outdoor clothing manufacturers like Craghoppers, for example, produce a series of winter trousers which have a fleece and other lining inside for added protection and warmth. If you are layering up, you might use base layers like thermal leggings. I have used Merino wool base and Icebreaker

layers for several years for both archery and winter sports such as skiing. These don't come cheap, but last long, so are a worthwhile investment. Outer wear needs to be windproof. A standard fleece may be warm in still air, but in a breeze, let alone a gale, the air travels straight through it. So pay attention to the outermost fabric layer, and remember that waterproof also usually means windproof. At the same time whatever you wear needs to allow you to move freely. Archery in restrictive clothing is like fighting with one hand tied behind your back.



NECK BUFFS ARE VERSATILE AND INEXPENSIVE IMAGE – JOOM.COM

TIP 5 - HEAD, NECK AND OTHER

Scarves can get blown around, and they can also get caught in your bowstring. Neck buffs are secure, effective, and adaptable as to what you want to cover at any one time. Close-fitting hats are not only the most secure, but also tend to retain warmth the best.

Whatever you're doing it's always worth carrying a spare set of socks, boots or even a change of clothes in the back of your car so that when you do finish the tournament you've got something dry to change into. For the same reason, I carry a towel in the back of my car so I can dry my bow and kit before storing it in the car. One other essential on field shoots is a decent umbrella. Some people opt to use large golfing umbrellas so that a whole shooting group can huddle underneath while checking scores. Whatever you're doing, enjoy yourself. If you can stay warm and dry, whatever your level of success or failure, you should at least have an enjoyable day. ☺

NEW PRODUCT

IMAGES - @TRUBALLAXCEL



THE NEW AXCEL ACHIEVE XP PRO

Sophie Meering introduces the 2024 game-changer in tournament sights, the Axcel Achieve XP Pro



The highly anticipated TRUBall Axcel 2024 sight is finally here, and it's already making waves in the archery community. The top-tier compound and recurve Axcel Achieve XP Pro tournament sight boasts many impressive stand-out features.

The first is the innovative micro-adjustment 1st axis system. Once both lock screws are loosened this enables the adjustment screw to be manipulated forward and back to level the 1st axis. After the desired position is achieved, the screws are safely locked in. It is a straightforward yet impactful improvement.

The second is the Diamond Weave UHM Carbon Bar. The re-designed weave pattern on the Ultra High Modulus carbon bar promises to minimise even more shock and vibration, reducing the twisting by 50%! This enhancement is said to contribute to a more stable and accurate shooting experience.

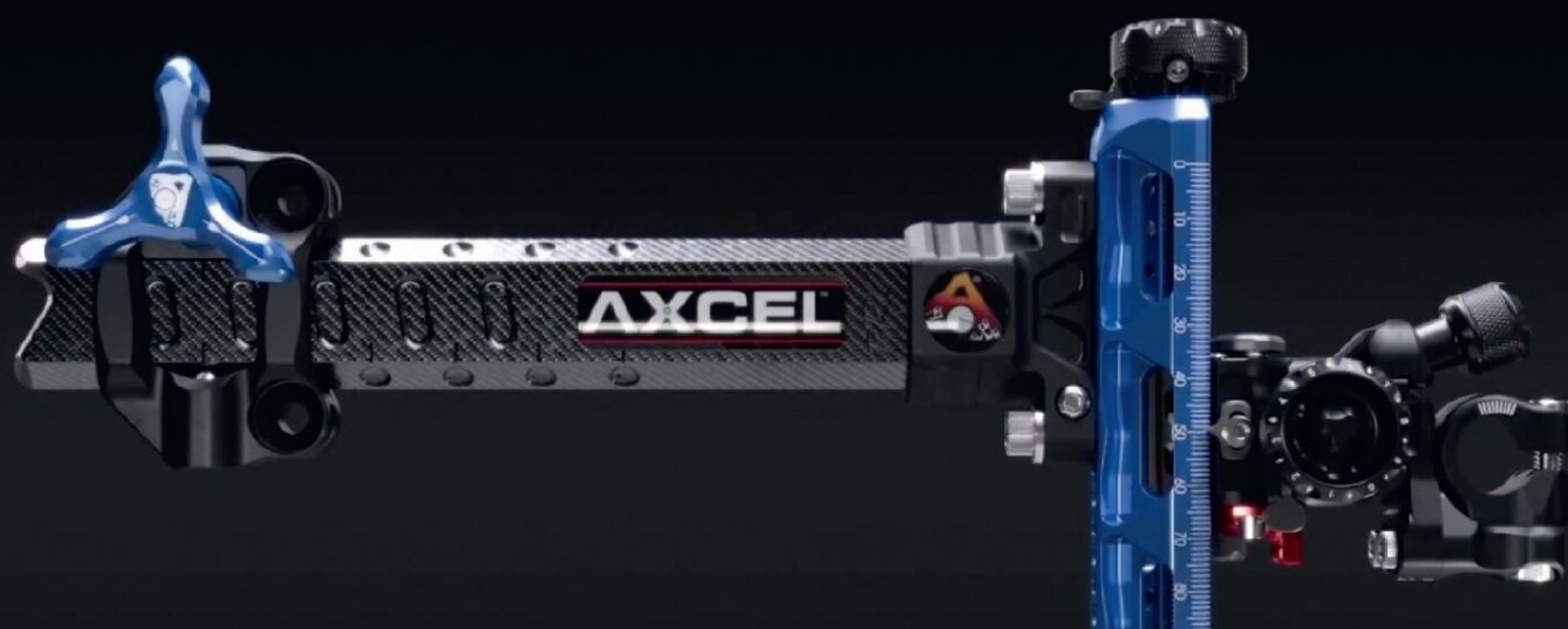
Third is the inclusion of a Dual Bridge Bow Mount Bracket. The lighter and stronger CNC-

machined mount bracket allows the sight bar to slide through it rather than into it. The dual bridge design adds an extra layer of stability, ensuring a more secure fit.

2nd and 3rd axes have been included and updated especially for field and compound archers. These are now more compact and are lighter than those on the 2024 model predecessors. The lighter removable block system promises ease of use that will improve target accuracy. The recurve-only model has a new Sleeve Lock system; the compound-only has a built-in micro adjustable yardage pointer with metal sight tapes.

Additionally, the sight now allows for adjustments on both windage and elevation with Lock Downs for zero movement, making it the only tournament sight to offer single screw balanced tension; compounders with heavy scopes will benefit from this feature the most. It is important to note that the Superior Vibration Dampening (SVD) system should not only enhance the accuracy but should also serve to protect surfaces from dust and dirt, and some potential unwanted damage.

Let's see what the latest cutting-edge TRUBall Axcel sight will bring to the tournament scene in 2024! 🎯



ULTIMATE NEW 2024 FLEX

PATENT PENDING

FASTEST FIRING MECHANISM WITH NO COCKING BAR!

ACTIVATED BY THE BOW DRAW WEIGHT, INSTANTLY FIRES THE RELEASE WHEN TOUCHING THE TRIGGER, IN COMPARISON WITH DELAYED COCKING BAR FIRING MECHANISMS WHEREIN SPRING POWER IS REQUIRED TO BEGIN THE SEQUENCE OF EVENTS, OPENING ONE SEAR AND THEN ANOTHER BEFORE FINALLY OPENING THE FRONT GATE/JAW TO FIRE SHOT

QUIETEST DOUBLE SEAR RELEASE ON THE MARKET TODAY!

TSHS
TRI-STAR HOOK SYSTEM

ADDED MAGNET AUTOMATICALLY RESETS,
READY TO SHOOT SHOT AFTER SHOT

HARDENED STAINLESS
STEEL TRI-STAR SEAR

PATENTED
MDL
MICRO-ADJUSTABLE
DRAW LENGTH

QUICKLY AND EASILY SHORTEN OR LENGTHEN THE
RELEASE HEAD, WHICH INSTANTLY PROVIDES A FASTER
OR SLOWER SHOT SEQUENCE WHEN PULLING ON THE BACK
WALL OF THE BOW DRAW CYCLE

ULTIMATE FLEX ADDS WEIGHT BY HALF BRASS
AND HALF ALUMINUM CONSTRUCTION

ADJUSTABLE
3-AXIS KNURLED
THUMB TRIGGER

PATENT PENDING
SUPERIOR ERGONOMIC HANDLE
EFH ERGO-FIT HANDLE
TECHNOLOGY

TAPERED FINGER SCALLOP
SURFACES LOCATED ON SIDES
OF RELEASE

QS QUICKSILVER FINISH
CORROSION RESISTANT ELECTROLESS
BRUSHED NICKEL PLATED BRASS

PATENTED THE FIRST AND BEST ADJUSTABLE FINGERS!
ULTRA-FLEX PERSONALIZED FIT SYSTEM

ADJUSTABLE 3 FINGER PIECE:
30° OF RADIAL ROTATION (15° FORWARD AND 15° BACK) IN 1 LOCATION

- 4 FINGER ARTICULATING HANDLE PIECES SOLD SEPARATELY
ADJUSTABLE 4TH FINGER (SOLD SEPARATELY) PIECE: 30° OF RADIAL
ROTATION (15° FORWARD AND 15° BACK) IN 2 LOCATIONS



THE REAL #1

ANYONE CAN CLAIM IT. WE PROVE IT!



JESUS CHRIST IS THE ONLY UNLIMITED RESOURCE!

WWW.TRUBALL.COM | 434-929-2800

GARDEUR ROBIN IMAGE: WORLD ARCHERY



THE UNMARKED GAME

Rob Jones gives advice on how to improve on the “unknown”

We all want to improve our game regardless of the bow style we are shooting. But how can this be done when shooting unmarked distances? Most of my shooting has been under the NFAS, which promotes itself as the home of unmarked distances. Usually, I shoot either an unsighted recurve or a one-piece American flatbow, both with wooden arrows and feather fletching. In unmarked rounds most common distances shot are between five to over sixty yards. However, in this discipline improving your game is not just about hitting the target more often or with greater accuracy. In this article I will look at what the archers can do for themselves as well as at the role their equipment plays.

BINOCULARS AND RANGEFINDERS

My first tip would be to consider practising using binoculars and a rangefinder. These should help develop your skills for unmarked distances, especially if you are a gap shooter or use some form of conscious distance judging to adjust your sight or point of aim. Note that the rangefinders are prohibited at unmarked 3D and Field rounds as in competition; binoculars are permitted, but please check with NFAS and WA respectively to confirm the allowed purpose of their use for any specific round.

While I am coaching for improvement, my goal is to help archers develop their distance judgement, and these tools should help them understand how their arrows fly and how they impact at different distances.

The binoculars are helpful after the

archer has shot, to ascertain where the arrows landed on the target, and to improve understanding of how much “over” distance their arrow has flown and how it behaves at different distances.

The rangefinder will help the archer develop the skill of distance judging and ground reading abilities. The student can make an unassisted judgement of distance whilst the coach ranges it. The coach can then allow them to shoot if their judgement is reasonably sound, or if they make a substantial error, discuss corrective tactics.

I have always thought of myself as an instinctive archer (not cautiously judging distances), so for me a rangefinder is less useful, though binoculars help for the longer shots.

GET YOUR KIT ON

Practise with your kit - this may sound like unnecessary advice, but with Field archery you often need to carry extra gear around with you, including your clothing, waterproof layers, spare arrows, and so on. All this can be a burden on a field course, which may be anything between 3 to 6 miles long, so it pays to get used to carrying it from the start. The belt quiver might be fine for 4 or 5 arrows but if you add in another 4 or 5 spares it may be a bit much. I only carry 3 arrows in my quiver and the rest are in an arrow tube on my back. It keeps them safe, dry and out of the way; I do this whenever and wherever I practise. And when it comes to clothing make sure everything, including your footwear, is versatile, in case of varying or changing conditions.

If you are comfortable with what you are wearing and carrying, it's one less distraction, which helps improve focus.

DON'T BE SHY – LOOK FOR ADVICE

Asking for help and getting some coaching. There are lots of capable archers and coaches on the circuit who will be more than happy to offer help, feedback and thoughts on how you can improve. My coach used to tell us that if we were unsure of something at the beginning of shooting, he told us to always focus on the shot sequence and form. It's better to know that you've executed a good shot and missed than to be so stressed or anxious that you go to pieces and miss due to a poorly executed shot.

There are plenty of other useful resources like YouTube, podcasts and written material where you can gather some useful tips. Bowjunkie podcast has recently recorded some good material offering advice and thoughts on distance judgement. Just be aware that what works for one person may not work for you; take your time and work through the suggestions.



IMAGE – WORLD ARCHERY

BOW

INTERNATIONAL

BY ARCHERS, FOR ARCHERS

2 ISSUES FOR £6.99*

*Direct Debit offer price payable every 2 issues.





IMAGE – WORLD ARCHERY

A PERISHABLE SKILL

Much has been written on the development of distance judging techniques. As an instinctive shooter I have realised that my subconscious ability to judge distance accurately diminishes when I'm not shooting - it's a perishable skill. I need to be shooting regularly to maintain that ability. This means that whatever technique you decide to use will demand constant practice. I know archers who carry a rangefinder in their pockets when taking the dog for a walk to hone their skills.

BASE DISTANCE

What's your base distance? Base distance is the distance you are familiar with and can judge quickly and accurately. It might be the distance you shoot at your indoor range or favourite target at your club. The important thing is that it is the distance you are familiar with and can judge with no effort. For most archers I've dealt with 20 yards, or 20 metres, their club range length, is their base. Once you've established your base distance, when shooting an unmarked distance, try to estimate it by comparing

ENJOY THESE GREAT SUBSCRIBER BENEFITS

- NO NEED TO GO TO THE SHOPS WITH CONVENIENT HOME DELIVERY
- SUBSCRIBE FROM JUST £6.99
- YOU'RE IN CONTROL – MANAGE YOUR SUBSCRIPTION ONLINE

CALL 0207 101 25 25

Lines open Monday to Friday, 9am-7pm

IMAGE – WORLD ARCHERY



it to your base distance. I used to coach a cricket umpire, and his base was a cricket wicket. This way you should soon start to build up good distance judgement.

As a course layer I will use every trick in the book to disguise the true distance to a target. These can include ensuring there is undergrowth to hide the legs of the animal, or framing shots between trees to provide avenues. So you need a variety of ways to judge the length of a shot. Familiarisation with the sizes of the 3Ds or target faces helps, but you will need to have encountered them before. You can try to use the land and vegetation around you; you might use the size of the trees in the area to give you an approximation.

A COFFEE WILL HIT THE SPOT

Use coffee cups for practice! I drink a lot of Costa coffee, the standard size cup. I know what the cups look like at different distances; but you can use any same size item to help you. I use a Costa cup as a base because of its size, it's about the size of the kill or highest scoring zone on a 3D or paper face. To learn I have set the cups at 20, 25, 30, 35 or 40 yards. If I know I have a good chance of hitting one at 40 yards, I know that if I misjudge it only slightly, I'll probably still be

in a scoring zone. Aim small, miss small.

If I want to simulate a 3D target behind cover, I stick a cup on a bean pole to elevate it. In competition, if I am unsure of the distance, I try to imagine what a costa cup would look like at that distance. I can then shoot at the imaginary cup.

INCREASE YOUR CHANCES - "SHOOT THE LEG LINE"

If you shoot 3D you would have heard the phrase "shoot the leg line". The idea is simple: if you are unsure of the distance, adjust your aim to follow the leg line of the target; should you misjudge it and the arrow falls low, there is still a chance you will impact in a scoring zone. It may not be a high scoring arrow and it may drop into the leg, but it will still score.

KEEP IT CONSISTENT

We talk about archery being the art of repetition, and the same principle applies to one's equipment. The weight tolerances in the manufacture of carbon arrows means they are pretty consistent from shaft to shaft. However, many trad shooters are using wooden arrows, which can vary significantly in weight, even if well matched in spine.

I have lost count of the number of

traditional archers I've coached who have been surprised when I've asked them about their arrows and what they weigh. They'll be able to tell me the point weight in grains, fletching size, wood choice and what the spine is, but less will know the total mass weight of the arrows. When I've randomly picked 8 arrows from their quivers and dropped on a grain scale they are then shocked when they find one arrow might be 50 to 80 grains heavier than the other; (the largest difference I've encountered was 112 grains!) So it's worth investing in an inexpensive grain scale for weighing your arrows, so you can then group them into batches of similar weights.

It's also worth remembering that the wooden fibres in the arrows break down over time due to constant impact, which degrades the spine. The same consideration applies to feather fletching, especially if you are shooting outdoors in all weathers. So, keep a close watch and check over your equipment, much like you do with your archery form.

Shooting unmarked distances is something I truly enjoy, but and at the same time it can be frustrating. If you haven't tried it then give it a go, and I hope these tips prove useful. Enjoy your shooting and thanks for reading. 🍷



PUT YOUR SHOULDER TO THE WHEEL

WITH LUCY O'SULLIVAN

WINTER IS COMING! GET THOSE SHOULDERS IN TIP-TOP CONDITION

It's time to talk shoulders, and the magic of strength training for archery. Winter is the perfect time to work your shoulders – the hard work will pay its dividends in the summer months. Building robust shoulder muscles can improve shoulder stability, draw strength, and overall endurance, preparing you for the outdoor season; and strong shoulders can also help prevent injury. Gym machines can be difficult to set up to suit the individual, especially if you are a shorter person like me, so, as a strength coach, I love using free weights which allow people of all heights and sizes to train well.

WHICH MUSCLES ARE GREAT TO TARGET?

The shoulder is a complex joint with many muscles that allow movement and aid stability including those linked to the muscles of the back. The main ones are:

1. **Deltoids (Delts):** The deltoids are the large muscles covering the shoulder joint. They consist of three parts: anterior (front), medial (middle), and posterior (rear). They play a key role in lifting the arm in all directions.
2. **Rotator Cuff Muscles:**
 - Supraspinatus: initiates abduction of the arm; (lifting the arm away from the body).
 - Infraspinatus: assists with external rotation of the arm.
 - Teres Minor: also aids in external rotation.
 - Subscapularis: facilitates internal rotation of the arm.
3. **Trapezius (Traps):** The trapezius is a large muscle that extends down the back of the neck and spine. It assists in shoulder movement and scapular (shoulder blade) stabilization.
4. **Rhomboids:** The rhomboids (major and minor) are located between the shoulder blades and contribute to scapular movement and stability.
5. **Latissimus Dorsi (Lats):** whilst primarily a back muscle, the latissimus dorsi also connect to the upper arm bone and assist in various shoulder movements.

These muscles work together to provide a wide range of shoulder movement, including abduction, adduction (bringing the arm toward the body), flexion (raising the arm forward), extension (moving the arm backward), internal rotation, and external rotation. Strengthening these muscles is crucial for shoulder stability, mobility, and overall upper body strength.

10

SHOULDER EXERCISES

KEY BENEFITS OF SHOULDER STRENGTH FOR ARCHERY

Strong shoulders provide the foundation for a powerful draw. Shoulder strength enhances the ability to maintain a steady aim, and all muscles of the shoulder complex must work together in harmony to help achieve control and target precision.

I like to work the muscles in different ways and generally prefer compound exercises (an exercise that engages multiple muscle groups in one go). If you are pressed for time at the gym, I would recommend starting with an exercise like the overhead press. If you have more time, I suggest mixing in a couple of isolation exercises, like the lateral raise, to target specific shoulder muscles. By working both compound and isolation, you ensure you're not missing any crucial muscle fibres.

To help iron out muscle imbalances and improve stability, I would recommend working both unilateral exercises - working one side at a time - and bilateral exercises, (where both arms work together). Incorporating both kinds into your strength programme is essential.

Two to three weekly workouts are a good balance, and consistency is key. However, remember not to neglect time behind your bow as well. This winter why not try archery training in the morning and gym in the evening? This gives a good balance. But also make sure you are giving your muscles adequate time to recover. Always listen to your body; if you feel fatigued, take a rest day, a light rehab, or a yoga recovery day.

CAUTION: Remember to choose weights wisely! Prioritise proper form, and challenge yourself progressively. Archery demands a holistic approach – don't forget your core, legs, and arms. But happy shoulders mean happy shooting!

Instagram: @osullivan_archery



01



OVERHEAD PRESS



02

LATERAL RAISE



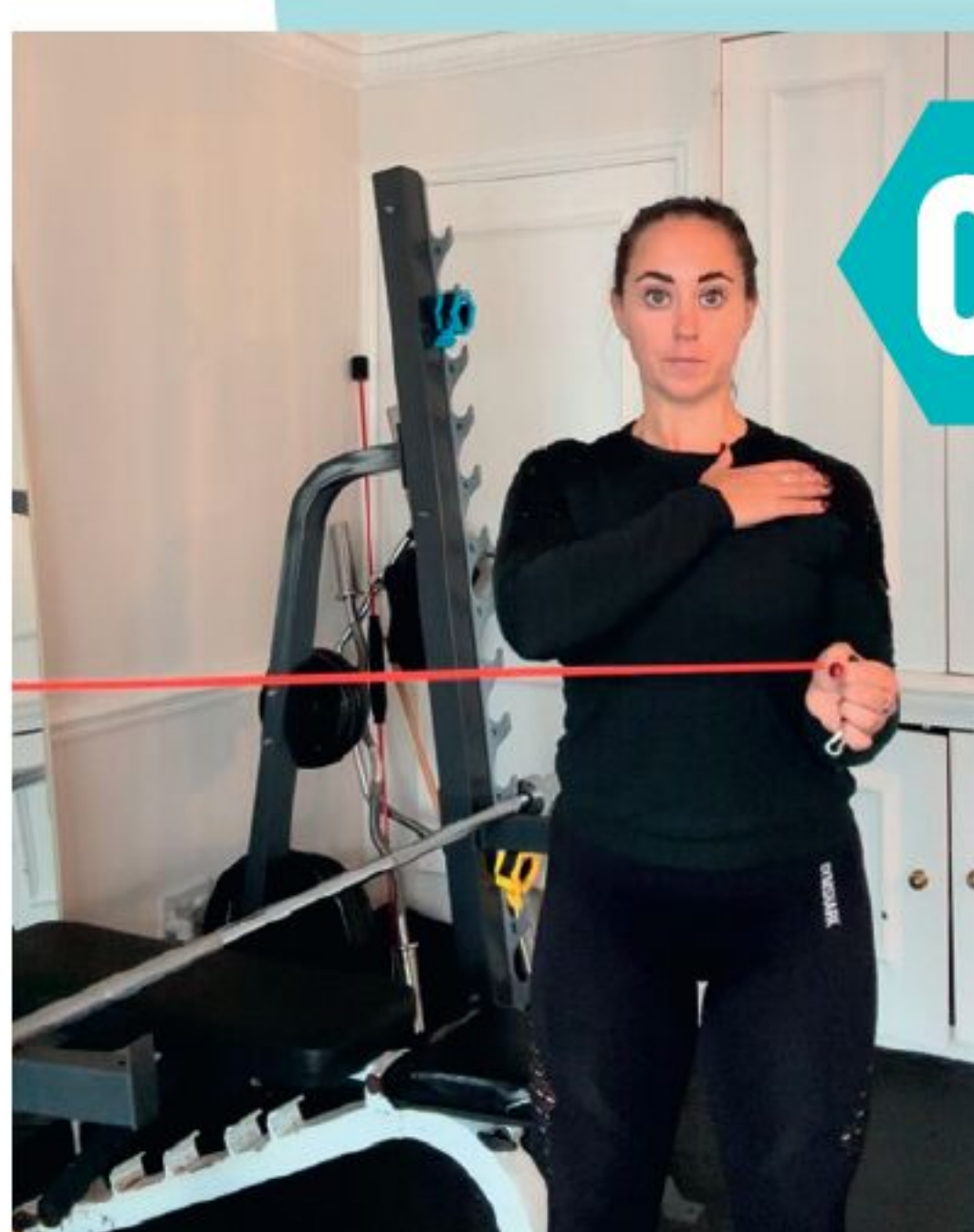
03

FRONT RAISE



04

UPRIGHT ROW



05



EXTERNAL ROTATION

01

OVERHEAD PRESS: BOTH ARMS AND UNILATERAL

- Stand with feet shoulder-width apart, press dumbbells/barbell overhead, engage shoulders and keeping ribs down.
- 3 sets of 10 reps.

02

ARCHERY STANCE WITH LATERAL HOLD

- Assume an archery stance, hold dumbbells at your sides, and lift laterally to 90 degrees.
- 3 sets of 10 reps

03

FRONT RAISES

- Stand tall, lift dumbbells in front of your chest, focusing on controlled motion.
- 3 sets of 10 reps

04

UPRIGHT ROW

- Hold a barbell or dumbbells, pull them straight up to shoulder level, pointing elbows up.
- 3 sets of 10 reps

05

ROTATOR CUFF - EXTERNAL ROTATION

- Anchor band, keep elbow against your side, rotate arm outward against resistance.
- 3 sets of 10 reps



SHOULDER SHRUG



HIGH PLANK

06

SHOULDER SHRUG

- Hold weights at sides, keeping your shoulder blades pulled slightly back elevate your shoulders towards your ears.
- 3 sets of 10 reps

07

CORE EXERCISES - HIGH PLANK

- Maintain a high plank, engaging core by squeezing the belly button into the spine and shoulders.
- 3 sets of 30 seconds

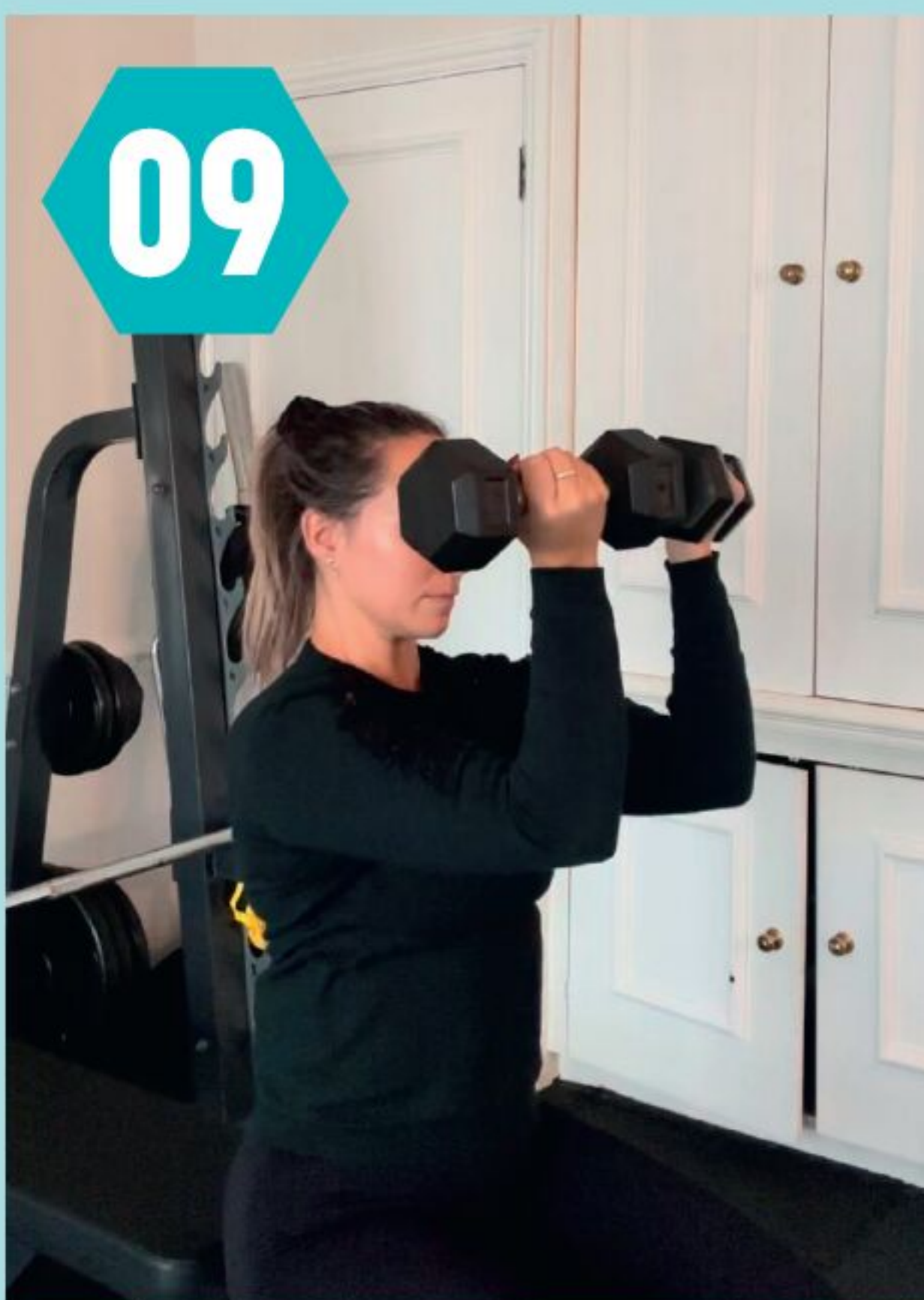


CUBAN PRESS

08

CUBAN PRESS (90-DEGREE EXTERNAL ROTATION TO OVERHEAD PRESS)

- Combine a 90-degree external rotation into an overhead press in a fluid motion.
- 3 sets of 10 reps



ARNOLD PRESS

09

ARNOLD PRESS

- Sit or stand, combine rotate dumbbells outwards in a fly motion to an overhead press.
- 3 sets of 10 reps

10

UPPER BACK EXERCISES - FACE PULL

- Attach a resistance band or use a cable rope attachment, pull the resistance towards your face, squeezing the shoulder blades together.
- 3 sets of 10 reps



FACE PULL



ASK 是 EXPERTS

Q What aspect of recurve form and execution is the most vital in securing high level accuracy?

A There is a bunch of 'stuff' which adds up to recurve accuracy. Your bow needs to be set up properly, and tuned correctly, you must shoot matched ammunition (arrows); form aspects, such as stance, bow grip, and fluency past the clicker, practice time, and a cross-section of other desirables are important, obviously, but the most vital is

alignment. Bone to bone, 180-degree line, from the front half of the shot to the back half at anchor, is absolutely imperative. Why? Because, unlike the compound archer, who has a one point hold on a loop directly behind the nock of the arrow, a recurve archer has a three finger hold (in most instances) and release, which, if not negotiated in a 180 degree line, will spell immediate disaster. Why? Because the string oscillates on release, no matter how fluent and proficient you are. Simple physics tells us that the less oscillation and the more

consistent release of the string will only be attained if it all happens in one straight line. Pulling fluency through the clicker and release of the string are both optimised if you are functioning in a straight line. Watch the top Korean recurvers, especially from the front on camera, and you witness perfect alignment, quick and easy passage through the clicker via scapula motion, and a quality release straight back in line with minimum and consistent oscillation. This is the way to shoot a recurve bow.
Roy Rose



STRATOS

SARA LOPEZ

World Cup Final Gold Medal

Stratos 36 HBT

CHAMPIONSHIP PROVEN

MIKE SCHLOESSER

World Cup Final Gold Medal

Stratos 40 SVX



FORMULA XD AXIA

KIM WOOJIN

World Cup Final Gold Medal

Formula XD Riser / Axia Limbs

CHAMPIONSHIP PROVEN

Immediately after launching the 2023 Hoyt Stratos, Formula XD Recurve and Axia limbs, Team Hoyt archers took to the field at the Archery World Cup Final and proved the potential of the new bows, putting up championship performances that set the stage for the next generation of Hoyt podium domination. Learn more at HoytTarget.com.

HOYT
ARCHERY

STRATOS™

FORMULA XD



PAPER POWER

60% of the energy used to produce paper and paper packaging in Europe comes from renewable sources.

Discover the story of paper

www.lovepaper.org

Source: Confederation of European Paper Industries (CEPI), 2018
CEPI represents 92% of European pulp and paper production



IMAGE: WORLD ARCHERY



Q Question for Roy Rose: I am an older archer, and being aware of your longevity and successes as a masters recurver and compound, how do you describe your philosophy and shot process state of mind?

A Our sport hinges on duplication, so over the years I've developed a shot process, and a state of mind, which encompasses the basics of good form, yes, but more importantly, trust, calmness, patience, comfort, all the mental and physical attributes which allow one to be consistently repetitive. Even the average club archer shoots a goodly percentage of golds, but it's about having the composure to make every shot as good a shot, which separates the elite archer from the pack. It is critical to make early form decisions, and to then hone them into a routine which becomes as duplicative as our human make up will allow. So, one must settle on as comfortable a draw and anchor set-up

as possible, considering the physical and mental forces involved in competition. One of my most repeated axioms is that "comfortable is repeatable", and that is the essence of accuracy. As regards the compound situation, we need to decide on a release aid choice, and how we make it fire, and then stick with it. 'Chopping' and changing cannot possibly work hand in hand with a goal of duplication. As far as execution is concerned, I concentrate on the back half of the shot, allowing the aim to become the domain of the subconscious by simply looking at the 'x'. My state of mind, execution-wise, is maybe a little unusual. I work on trust and patience. I have a belief, rightly or wrongly, that my Hoyt (bow) has its own consciousness somehow. It is saying to me: "I will shoot this shot the same every arrow if you just trust me and, with patience, allow me to shoot with a minimum of imposition". Don't get me wrong, I am not a waiter. I realise that I must be proactive at full draw to attain

execution, but I do have a state of mind, which, along with my expansion, wants to let the bowshot itself. This combination of trust, patience, and comfort, affords me the very best chance of being video-replay-like, arrow after arrow. The eye centering capacity will make the aim if we just look; the back half must function with absolute trust and with as high a degree of comfort, as holding poundage and dealing with competitive stress will permit. None of us are perfect, even the very elite will experience the physical and mental challenges which result in less than excellent shots, but their duration of duplication remains almost flawless, hence their status. So, in summary, if you settle on your equipment, shot process and execution, resist assessment and change, build trust, form a comfort platform, aim by looking, and execute with calmness and patience, you will be well on the way to being the best you can be at any age.
Roy Rose

Q I've tried a number of different release aids, even some of the very latest, and I am still not scoring well; what should I do?

A Almost every question-and-answer session brings up this query. Changing from one release aid to another is both expensive and completely unnecessary. Worse still, it is completely at odds with the basic concept of archery, that accuracy can only be attained by duplication. We are all aware that if it were humanly viable to make every shot a video-replay of the previous

one, then all our arrows would group in the same spot. Our sport is all about simple duplication. So, if an archer is switching constantly from one release to a new one. From thumb button to a hinge, or from one execution method to another, then obviously no duplication, no 'sameness' of execution can be occur. There are a number of lessons to be learned about release aids. Firstly, they all work when shot correctly. Someone somewhere is shooting perfect scores with the model you are about to discard. Secondly, many elite compounders have shot the same release, the exact same model, the exact same way, for years,

sometimes decades, and this is why they are so successful. Change is your enemy. You cannot hope to attain duplicative form and execution, and hence high-level accuracy, if you are continually trying new release aids, and different methods of execution. Certainly, at the outset you will experiment, but once you settle on the one that feels the most comfortable, then practice the heck out of it, and resist the urge to fiddle. Comfortable is repeatable, and duplication is your goal. Execute the same each and every arrow, and you are well and truly on the way to being the best you can be.



Consult previous Issue, 174, for an excellent article by Duncan Busby where he talks about selection and pros and cons of all release aid types.

IMAGE: JOHN DEMMER

"THIS IS THE BEGINNING SETTING I LIKE TO RUN WHEN STARTING TO TUNE AN ARROW"



ASK EXPERTS

with John Demmer III

Q I am relatively new to barebow but have by now automated my process and have consistent grouping. I wanted to tune the plunger tension to move grouping. I have not done this before, I simply aimed off in the past. I use the Beiter button, and it's currently set at 5. I would like to learn how to fine tune so I can aim more centrally. How do I start and what are the simplest ways of remembering principles for changing spring tension?

A There are many ways of going about tuning with a plunger. I generally think a little bit outside the box in my approach for centre shot, but

that's another story.... As you can see in the picture, this is the beginning setting I like to run when starting to tune an arrow. You will notice that it is not fully cranked down nor is it backed all the way out. I have two full revolutions from the weakest setting. I run this approach because it gives me a good variety of settings; I can run and manipulate the downrange impact, both to the left or to the right, if needed. Let's just assume you are a right-handed shooter. If you are a left-handed shooter just flip the impact results. If you approach it starting at the mid setting, you are very limited in what you can do with the arrow impact down range. Starting at the midrange, you will find that you will have a hard time moving the arrow

left on impact when tightening up the tension. You will, however, find it very easy to move the arrow to the right if you loosen the tension. If you start it at the minimum setting you will find it impossible to move the arrow to the right, but you will easily manipulate that arrow to the left if you turn the tension clockwise. By starting it where I like to begin, or something close to it, you will notice that you will have the capability to move the arrow left or right rather easily. The amount it moves the arrow left or right depends on the individual's bow poundage, arrow weight and arrow spine. Everyone varies a little bit, but you will get a good handle on how slowly or quickly it moves the impact as you move the dial.



ENSURE IT DOESN'T CREATE A WEDGE BETWEEN THE ARROW AND THE WIRE; CREATE A SLIGHT FORWARD-UPWARD ANGLE; LEAVE ENOUGH ROOM FOR THE WIRE TO MOVE; TRIM UNNECESSARY WIRE IMAGE: JOHN DEMMER

ASK EXPERTS *with John Demmer III*

Q I want to cut my arrow rest a bit to avoid contact with the arrow shaft, but am a bit apprehensive, I don't want to cut too much. How should I know how much to cut, can you show an example? I use Spigarelli ZT. Thank you.

A Cutting your wire is probably one of the easiest things to do on your kit and it is not difficult to get it to work properly. That being said, I have seen quite a few that overlooked a few key concepts when they approached customizing their wires.

There are three key things to consider when adjusting your wire to a better fit. When you shape it, make sure it doesn't create a wedge for the arrow to get stuck between the wire and plunger upon release. You should also make sure you have enough room for that arm to freely move completely out of the way. Lastly,

trim all unnecessary extra wire to prevent all possibilities of your arrow coming in contact with the wire when it is moving past the arrow rest.

I have seen many ways in which people have bent and trimmed the wire, but I find the easiest way to cut and shape it is as it appears in the photos.

As you can see, it has a slight angle to the arm both forwards and slightly upwards from right to left. That way, the arrow naturally wants to keep in contact to the plunger button at all times until the release of the string. If you look at the photos, you will see that there is plenty of room for the wire to swing closed; this (space) will help avoid any unnecessary contact to the arrow when released. Also, take note that there is just a tiny overhang (excess wire) past the left edge of the arrow. There is minimal overhang on purpose. Oftentimes when we release the arrow, the back end of the arrow will naturally want to flex back when

moving around the plunger. A properly tuned arrow will clear the plunger with no problem; however, it will not clear a wire that has too much overhang.

I show you my way of bending the wire, because I have transitioned away from the traditional Spigarelli ZT rest arm shape once I started shooting their MTR arm (Micro Tuning Rest). Since then, I tried to find a better and simpler bend solution, and this is what I found best suited for me and my needs. The reason why I got away from the traditional long armed simple straight wire is because I found that it wanted to pinch the arrow and not swing shut upon release. It created a very long V shape, and, every now and then, the arrow would get caught inside that V, created contact, and strayed away from the centre of the target downrange more frequently. Just remember to keep those three things in mind when changing your wire up from manufacturers specs.

THE
core
SERIES

lower price.
same high quality.



<https://rcore.co>

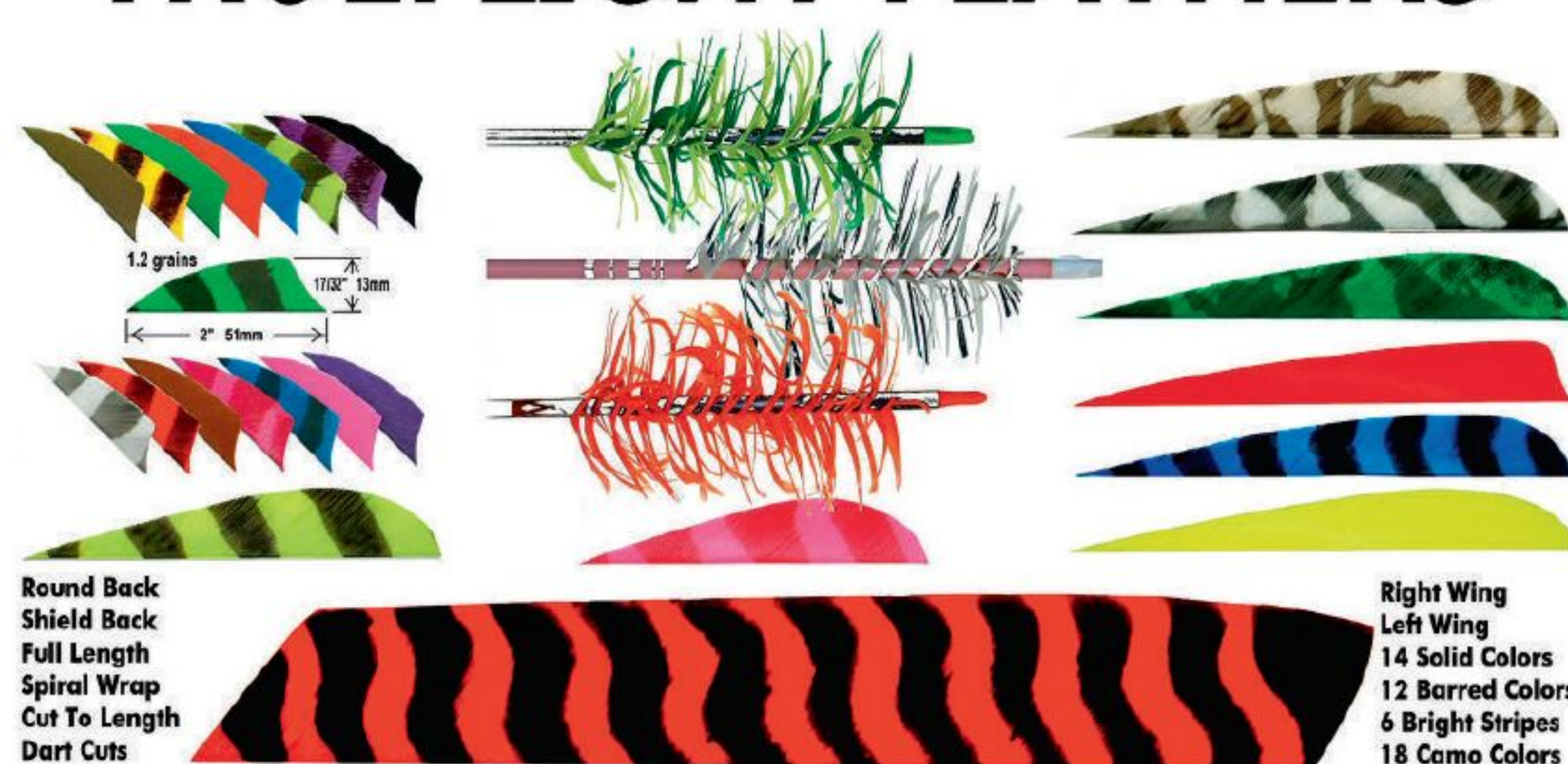


DESIGNED & MANUFACTURED BY



www.trueflightfeathers.com

TRUEFLIGHT FEATHERS



Beauty, Variety, and Performance!

- Spiral Wrap+[®] Flu-Flu's
- Camo and Trueflight Barred[®]
- Brilliant Solid Colors
- Full Length, or Die-Cut to Shape
- Free Samples
- Free Newsletter



email@trueflightfeathers.com

TRUEFLIGHT

Manufacturing Company, Inc.
P.O. Box 1000, MANITOWISH WATERS,
WI 54545, USA (715) 543-8451

World Leader in Precision Feathers for over 65 years.

KNOX

W & J KNOX

BACKSTOP NETTING

WHITE OR COLOURED NYLON NETS

ANY SIZES

ALL NETS SUPPLIED WITH STEEL

HEADLINE WIRE FOR EASY ERECTION

ASK YOUR RETAILER FOR KNOX

W & J Knox LTD, MILL ROAD, KILBIRNIE, Ayrshire, SCOTLAND KA25 7DZ

+44 1505 682511 • www.wjknox.co.uk • nets@wjknox.co.uk

FINAL NOTE

The ATA Show. Final Note. Reflections. By Kristina Dolgilevica

This was my first visit to the 2024 ATA Show, and I had been warned it would be heavy on bowhunting culture and gear. For this reason, the Europeans sometimes dismiss it as outside their sphere of interest. However, that turned out not to be the case. There were plenty of brands that produce and tap into every aspect of archery, with both Hunting and Target product ranges. The ATA website is an invaluable planning tool. It's not your typical schematic layout, but a detailed interactive planner, each booth signposted with all the individual brand details; and booths and events can easily be added to the planner. The Digital planner was automatically updated with locations and times, so you knew where you had to be and when. Once you had visited your planned event, you could tick it off, and, if you wished, add notes and photos in the planner. While this is not something new, it's a tribute to the level of organisation; nothing was half-baked, and everything was done with the visitor's experience and convenience very much in mind. It gave the strong impression that everything possible had been done to promote easy networking between the retailers and the visitors; there was no blind poking around the booths, everything had a purpose, and everyone knew what they were doing. In this respect it was far more sophisticated than some of the similar events I have attended. True I occasionally had to queue to speak to a specific person, like Tim Gillingham from Gold Tip, or the guys for T.R.U. Ball, or Easton, but that was compensated for by the undivided attention I received once it was my turn. If it hadn't been for the storms and the cancelled flights, the 2024 Show would have been packed to the rafters. If you think that this show is all about hunting, cast that thought aside; plan your trip and come over next year



IMAGE: KRISTINA DOLGILEVICA

IF YOU THINK THAT THIS SHOW IS ALL ABOUT HUNTING, CAST THAT THOUGHT ASIDE; PLAN YOUR TRIP AND COME OVER NEXT YEAR AND SEE FOR YOURSELF.

and see for yourself. Look, touch, try things out, make contacts, talk, discuss, but most important, plan your itinerary and visits a couple of days in advance.

Special thanks to the HuntingDay Coffee Company stand who were giving

out free unlimited coffee during the show – that is the best way to get me into places!

The 2025 ATA Show is scheduled to take place on January 8-10, in Indianapolis, Indiana. 📍

Advertisement



WE'VE GOT THE OPTIONS. YOU MAKE THE CHOICE.

We show you what's worth considering. All you have to do is choose what's right for you. And with only good choices, it's hard to go wrong.

Car, home and travel insurance plus broadband, breakdown cover and more. Compare quotes for over 40 products.

Get more info or compare quotes at go.compare



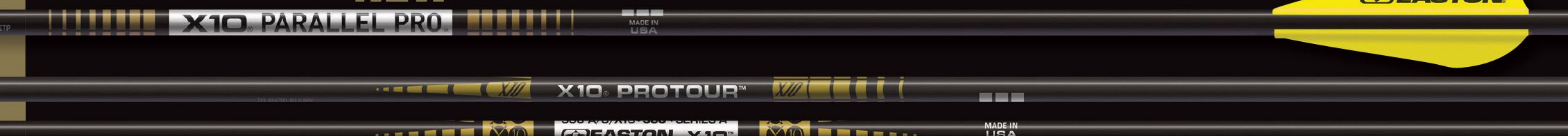
X10 | A TARGET ARCHERY LEGEND.



CONNECTING YOU TO THE 10-RING.

X10 arrow shafts stand as the ultimate in precision and winning results. Crafted with the finest aluminum and carbon (AC) materials using Easton's exclusive process, X10 embodies meticulous attention to detail. With an unyielding emphasis on accuracy, X10 empowers archers to reach unmatched levels of excellence. Experience X10 precision and unleash the confidence you need to find the 10-ring, shot after shot.

NEW



See the new 4mm X10 Parallel Pro at eastonarchery.com or visit your dealer today.
Made In USA

©2023