

# Flight Path



No 4, June 2012

**Editors comment:**

Welcome to edition 4 of "Flight Path", the newsletter of the British National Flight Archery Association. Tournament season is just round the corner, with the West Midlands flight on July 22<sup>nd</sup>. Always a good shoot. Did anyone spot my mistake on the entry forms for the Nationals? Unfortunately, a glitch meant the cost went down as £20.00, with cheques made payable to GNAS. This has been corrected for the entry forms included in this issue (if you haven't already entered). As always, your views are always welcome, letters may be edited as space allows. Please keep them coming.

**Dates for your Diary: 2012**

West Midland Flight Championships

July 22<sup>nd</sup>  
Adams Grammar School  
Longford Hall  
Shropshire

Contact

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National Flight Championships

August 18<sup>th</sup>  
RAF Church Fenton  
World Record Status

Contact A.Bakes  
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HULL  
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01482 375033  
[tbakes@tbakes.karoo.co.uk](mailto:tbakes@tbakes.karoo.co.uk)

Northern Counties Flight Championships

August 26<sup>th</sup>  
RAF Church Fenton  
World Record Status

Contact

A.Bakes  
332, James Reckitt Ave  
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**From the Archives:**

**A Brief History of flight 4**

**Update on strings**

Some may remember mention of a new string material from Brownell under the trade-name "Astro-Flight". This is just one of several advertised as low-stretch, low creep, high performance (along with the likes of the original Fast-flight, Angel Dynema and BCY 8122), but are there really any differences in performance? I decided to put them to the test. Strings made from 10 strands of either "Fast Flight", "Astro-Flight" "Angel Dynema" or "BCY 8122" were custom-made, and "shot-in" using 36 arrows each off my 50lb recurve. Each string then had six shots with the same arrows through a Chrony speed meter and the average speed (in fps) for each calculated. Results are:

	1	2	3	4	5	6	Av
Fast Flight	239	237	243	241	236	235	238
Astro Flight	238	239	233	240	237	244	238
Angel Majesty	243	241	239	241	236	240	240
BCY 8122	244	241	240	241	240	241	241

**Conclusion:**

All strings are "high performance" materials, developed to be low stretch and creep material. As such, they all show very similar speeds, with only 3 fps separating the best (BCY8122) from the worst (fast flight), too small to be significant. There are some new materials coming on the Market, so watch this space.

Interesting snippet on string materials from BCY fibres ( manufacturer of BCY8122)

***One thing to keep in mind. All are colours are a coating. We can not penetrate the fiber, so the colour sits on the surface. Some colours are heavier and bigger than others. Any of the fluorescent colours are big. White has no colour so it is the smallest and lightest, which should be the fastest.***

**Focus on Longbow Arrows Pt 1.**

There is nothing quite like shooting equipment you have made yourself, and I find nowhere as satisfying as making a really good longbow shaft.

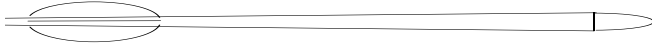
There are several different arrow types:

**Parallel**



This is the most common type of arrow seen on the archery range. The diameter is the same all the way down the shaft.

**Bob-tailed**



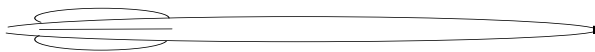
The bob-tailed arrow is thicker at the pile than the nock, throwing the balance point towards the pile.

**Breasted**



With the breasted arrow, the shaft gets thicker towards the nock, throwing the balance point backwards.

**Barrelled**



Like a barrel, this arrow is thicker in the middle, thinner towards the pile and nock. The secret to a good arrowshaft is to get stiffness where you need it, but to get the weight down to a minimum, and for this the barreled shaft will win every time.

**1: But where to start?**

There are four pieces of kit I find invaluable for making arrows – a needle gauge (available from most haberdashery shops), an “arrow-board” consisting of a piece of pine about 150cm x 150cm x 50 cm (more on this later), a spine tester (home-made) and a 3mm drill guide.

**2:Selecting the shaft.**

For me, a trip to an archery retailer (I am lucky enough to live an hour away from at least 3), where I can browse the raw shafts at leisure. If you cannot find a local retailer, just go for the stiffest 5/16 shafts you can get, generally spined at 45/50 lb. I then roll each of these in turn on the counter choosing the straightest shafts, then weigh each of these and pick the lightest dozen (you would be surprised how much the weight varies).

**3: Nocks and piles.**

For the piles, I use 5mm aluminium knitting needles (mostly bought from car boot sales), cut into 2cm lengths. Using an electric drill (with care) as a lathe, I file a 3mm diameter, 1cm long tang into one end of the length. Turning the length round

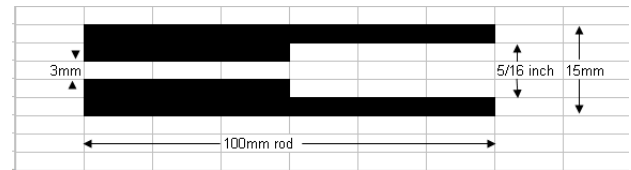
in the drill, I then file the unworked end to give a bullet profile (see below)



For the nock, I use the Easton pin-nock system

**4: Fitting the nocks and piles.**

I use my drill-guide to drill 3mm holes into each end of the shaft. The drill guide is a piece of rod 15mm diameter, approx 100mm in length. One end is drilled out to take a 5/16 inch arrow shaft, whilst a long 3mm drill bit can be inserted through the hole at the other.



In this way, I can drill 3mm holes 1cm or so deep exactly in the dead centre of the shaft. Once made, the pin-nock and pile can be glued into the shaft.

**5: Shaping the shaft**

This is where the arrow-board comes in. It really is the workhorse for making longbow arrows. Mine consists of a piece of pine, 150cm long, 150mm wide and 50mm thick (that’s 5ft by 6ins by 2 ins in old money). Along the back edge I have glued a dress-makers tape measure, and there is a guide glued to the front corner for cutting the fletchings (more on this later).

Starting by marking the exact middle of the arrow. Whilst rolling the arrow on the arrow-board with my free hand, I then sand the shaft down towards the pile to get a smooth taper to the end 150 to 200 mm. Turn the arrow, I repeat this to the nock-end. Finally, I sand the entire surface down until the shaft will slide through a 7mm hole in my needle-gauge (this diameter works for me, but you may need a little experimentation to get the best diameter shaft for your bow). This gives the basic barrelled profile. Next, I remark the exact centre of the shaft and balance the arrow on my finger to find the balance point of the shaft (at this point for me, I have found a balance point of about 5 mm in front of the centre-point of the arrow is optimum). Depending on where the balance point is in relation to the centre of the arrow, gradually sand down the pile-end or nock-end to move the balance point to your optimum. Finally, sand down the entire arrow to with finer and finer grit paper to get a really smooth surface, then paint with at least two coats of good-quality varnish, sanding down between coats to get a really smooth finish.

**6: Fletchings.**

Newsletter of the British Flight Archery Association.

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**Copy date for next issue: 30 April 2012**

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Email [tbakes@tbakes.karoo.co.uk](mailto:tbakes@tbakes.karoo.co.uk)

*Grand National Archery Society*  
*65th National Flight Championships 2012*



- Location:** RAF Church Fenton, Tadcaster, Yorkshire LS24 9SE. See map below.
- Status:** National Record Status and World Record Status
- Date:** Saturday 18th August 2012
- Guest of Honour:** To be confirmed
- Judges:** Range Captain: Amanda Bartram  
Assistant Range Captain: Andy Pointon
- Round:** GNAS Flight and FITA Flight:  
The National Trophies and Championship title will be awarded to the highest placed British GNAS member. GNAS Bow Weight Classes, will be converted to the Equivalent FITA Flight Bow weight Classes, most are the same. Any FITA Bow Classes and FITA Weight Divisions can be shot. THESE TO BE DECLARED AT REGISTRATION  
Distance Measurements will be in Metres for FITA requirements & converted to yds – ft – in for the GNAS Results. Separate FITA Bow Class and Distance Results will be produced for World Record Claim Purposes.
- Timing:** Bow weighing from 9:30 am onwards. Assembly 10:30 am
- Arrangements:** Four ends of six arrows will be shot, four class/weight divisions may be entered.  
Only one class/weight division may be shot per end.
- Access:** The range is on an RAF station; for security reasons, vehicle details are required with your entry. Check-in at the Guardroom for access to the site.
- Dress:** It is recommended that all competitors wear bright visible colours.
- Drug Testing:** Archers will be liable for drug testing, and competitors approached to give samples must comply. If they refuse, that refusal will be treated as a positive result. Entries from archers under 18 must be signed by a parent/guardian to signify their consent to their child being drug tested if approached.
- Photography:** In view of the provisions of the GNAS Protection of Children and Vulnerable Adults Policy, those who wish to take photographs at this event are to register with the Tournament Secretary on arrival. No unauthorised photography will be permitted.
- GNAS Cards:** Archers should have their membership cards available.
- Results:** Results will be published on the GNAS website. Go to [www.gnas.org/nationaltournaments/](http://www.gnas.org/nationaltournaments/) and then click on National Flight. If absolutely necessary, paper copies of the results can be sent; please enclose a stamped addressed C5 envelope (9" x 6½") with your entry.
- Entry fee:** £20.00 for the day Cheques payable to "Flight Path"  
No refunds after the closing date.
- Closing date:** Monday 7<sup>th</sup> August 2012
- Tournament organiser:** A. Bakes, 332 Reckitt Avenue, Hull, E. Yorks. HU8 8LJ  
E-mail: [tbakes@tbakes.karoo.co.uk](mailto:tbakes@tbakes.karoo.co.uk) Tel: 01482 375033

## 65th National Flight Championships 19th August 2012 – Entry Form

Forename:	Surname:
Address:	
Tel No:	E-Mail address: (Please write clearly)
Male/Female:	GNAS No:
Club:	County:
Nationality:	
Car Make	Car Registration Number

In which year were you born?

1992 or earlier

1993 or later (FITA Junior)

In this case only, please give date of birth: \_\_\_\_\_

**Bowstyle and Bow Weight:** Please tick relevant box(es) indicating bow style and weight division. You may enter a maximum of 4 bowstyle/bow weight combinations.

Bowstyle	Bow Weight Division		
	Under 35lbs	Under 50lbs	Unlimited
Class A: Recurve Target Bow			
Class B: Conventional Flight Bow			
Class D: English Longbow			
American Longbow Although not recognised by GNAS, awards will be given			
	Under 45lbs	Under 60lbs	
Class C: Compound Target Bow			
Class F: Compound Flight Bow			
	Under 95lbs		
Class E: Crossbow			

<p>I certify that I am a member of GNAS or a FITA Member Association. I will abide by current drug and dress regulations.</p> <p>Signature of archer:</p>	<p>If approached to for drug testing, I am willing for my child to be tested.</p> <p>Signature of parent/guardian of junior under 18:</p>
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If you use a wheelchair or have special requirements, please give details:

**Entry fee:** £20.00 for the day Cheques payable to GNAS  
No refunds after the closing date.

**Closing date:** Monday 7<sup>th</sup> August 2012



## *Northern Counties Archery Society* *Flight Championships 2012*

- Location:** RAF Church Fenton, Tadcaster, Yorkshire LS24 9SE. See map below.
- Status:** National Record Status and World Record Status
- Date:** Sunday 26th August 2012
- Guest of Honour:** Mr M Willrich
- Judges:** Range Captain: Amanda Bartram
- Round:** GNAS Flight and FITA Flight:  
The Northern Counties will be awarded to the highest placed NCAS members. Open titles will be awarded to the highest placed visitors. GNAS Bow Weight Classes, will be converted to the Equivalent FITA Flight Bow weight Classes, most are the same. Any FITA Bow Classes and FITA Weight Divisions can be shot. **THESE TO BE DECLARED AT REGISTRATION** Distance Measurements will be in Metres for FITA requirements & converted to yds – ft – in for the GNAS Results. Separate FITA Bow Class and Distance Results will be produced for World Record Claim Purposes.
- Timing:** Bow weighing from 9:30 am onwards. Assembly: 10:30 am
- Arrangements:** Four ends of six arrows will be shot.  
Four class/weight divisions may be entered.  
Only one class/weight division may be shot per end.
- Access:** The range is on an RAF station; for security reasons, vehicle details are required with your entry. Check-in at the Guardroom for access to the site
- Dress:** It is recommended that all competitors wear bright visible colours.
- Drug Testing:** Archers will be liable for drug testing, and competitors approached to give samples must comply. If they refuse, that refusal will be treated as a positive result. Entries from archers under 18 must be signed by a parent/guardian to signify their consent to their child being drug tested if approached.
- Photography:** In view of the provisions of the GNAS Protection of Children and Vulnerable Adults Policy, those who wish to take photographs at this event are to register with the Tournament Secretary on arrival. No unauthorised photography will be permitted.
- GNAS Cards:** Archers should have their membership cards available.
- Results:** Results will be published on the NCAS website.
- Entry fee:** **Adults:** £4.00 per class  
**Juniors:** £2.00 per class
- Closing date:** Monday 7<sup>th</sup> August 2012
- Tournament organiser:** Mr A. Bakes, 332 Reckitt Avenue, Hull, E. Yorks. HU8 8LJ  
E-mail: [tbakes@tbakes.karoo.co.uk](mailto:tbakes@tbakes.karoo.co.uk) Tel: 01482 375033

**Northern Counties Flight Championships 26th August 2012 – Entry Form**

Forename:	Surname:
Address:	
Tel No:	E-Mail address: (Please write clearly)
Male/Female:	GNAS No:
Club:	County:
Nationality:	
Car Make	Car Registration Number

In which year were you born? 1992 or earlier

1993 or later (FITA Junior)  In this case only, please give date of birth: \_\_\_\_\_

**Bowstyle and Bow Weight:** Please tick relevant box(es) indicating bow style and weight division. You may enter a maximum of 4 bowstyle/bow weight combinations.

Bowstyle	Bow Weight Division		
	Under 35lbs	Under 50lbs	Unlimited
Class A: Recurve Target Bow			
Class B: Conventional Flight Bow			
Class D: English Longbow			
American Longbow Although not recognised by GNAS, awards will be given			
	Under 45lbs	Under 60lbs	
Class C: Compound Target Bow			
Class F: Compound Flight Bow			
	Under 95lbs		
Class E: Crossbow			

If you use a wheelchair or have special requirements, please give details: **Entry fee: Adults £4.00 per class**

**Juniors: £2.00 per class**

Cheques payable to Flight Path

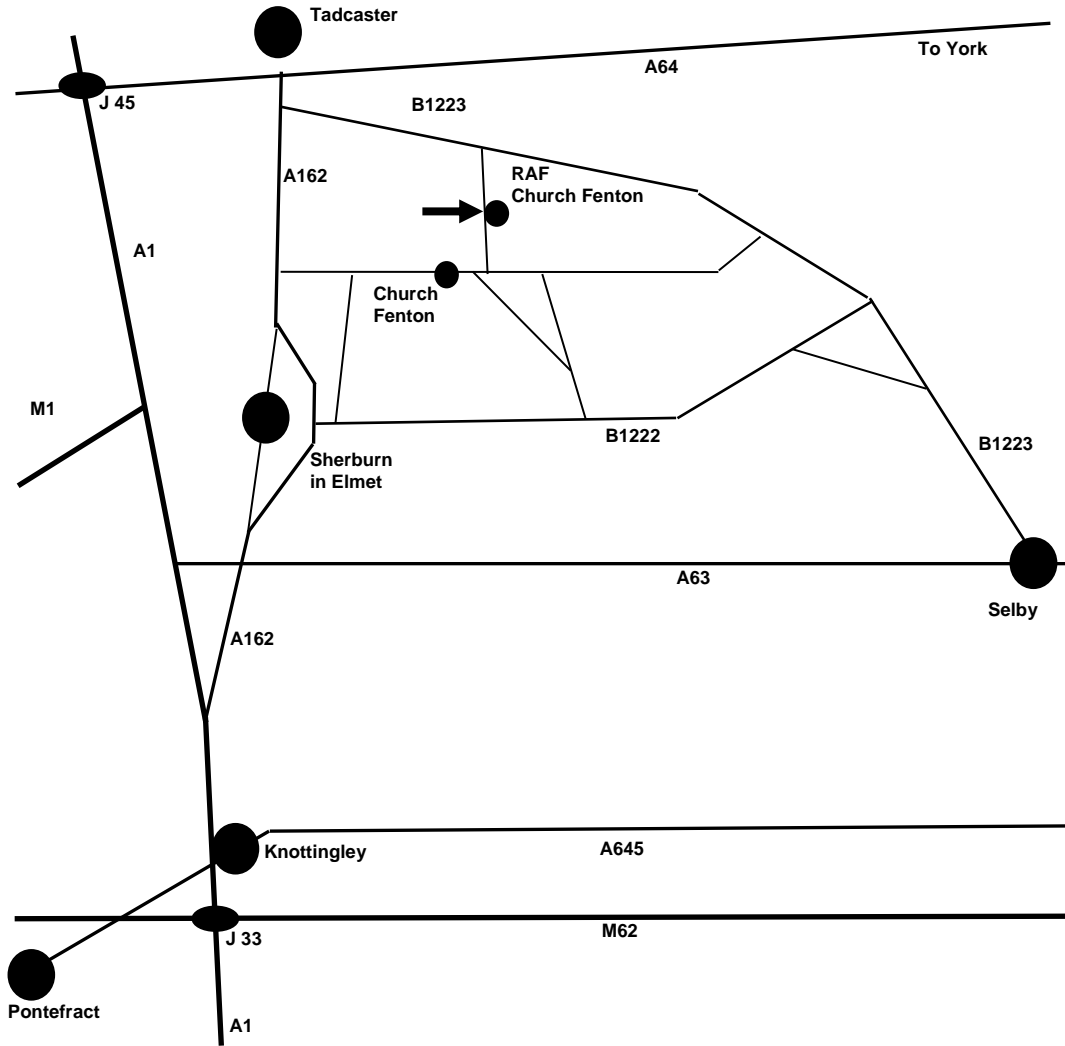
If approached to for drug testing, I am willing for my child to be tested.

Signature of parent/guardian of junior under 18:

**Closing date:** Monday 7<sup>th</sup> August 2011

**Entries to:** Completed entry forms, with cheques payable to Flight Path to be forwarded to the Tournament Organiser, Mr Tony Bakes, 332 Reckitt Avenue, Hull, E. Yorks. HU8 8LJ, Tel: 01482 375033





**18<sup>th</sup> WEST MIDLANDS ARCHERY SOCIETY AND OPEN FLIGHT CHAMPIONSHIPS - Sunday 22<sup>nd</sup> JULY 2012**

**Venue: Longford Hall (Adams Grammar School ) Shropshire.  
Bow Weighing: From 9.30am : Shooting Starts @ 10.30am**

**Lady Paramount: T.B.A. Range Master: T.B.A.**

**G.N.A.S. Rules of Shooting B.L.B.S. & N.F.A.S. Archers Welcome**

**ENTRY FEE per CLASS / Wt.Div**

**JOINT WMAS & OPEN :- Adults - £5/Class , Juniors - £3/Class  
Non WMAS Archers OPEN ONLY :- Adults - £5/Class , Juniors - £3/Class**

**ENTRIES TO: Mr. M. Willrich, 5 Broughton Close, Tillington, Stafford, ST16 1QS  
Tel: 01785 250490 e-mail : mwillrich@virginmedia.com  
Cheques Payable to: Mr. M.Willrich**

**Max 4 - Classes per Archer -Total 4 x 6 Arrow Ends**

**Please tear off below line & Return**

.....

Bow Class	WMAS Closed	WMAS Open	Gent	Lady	Jun Gent	Jun Lady
Class A Target Bow N/E 50lb						
Class A Target Bow N/E 35lb	////////////////////					
Class B Flight Bow N/E 35lb	////////////////////					
Class C Cmpd. Tgt. Bow N/E 45lb						
Class D English Longbow Unlimited						
Class D English Longbow N/E 50lb	//////////////////// ////////////////////					
Class D English Longbow N/E 35lb	//////////////////// ////////////////////					

**Please Tick Appropriate Boxes Above**

**WMAS Closed Championships : 3 Classes only as follows:  
Target Bows N/E 50lb, Cmpd. Tgt. Bows N/E 45lb & Unl. English Longbows**

**GNAS No: .....BLBS No:..... NFAS No:.....**

**Name : .....**

**Address : .....**

.....

**Club : ..... Entry Fee Enclosed : .....**

**Advanced Entries Appreciated to determine the Number of Awards**

**M.Willrich WMAS Flight Organiser**