

Tech Authoring Presentation_Atkins_1809912

by Stuart Atkins

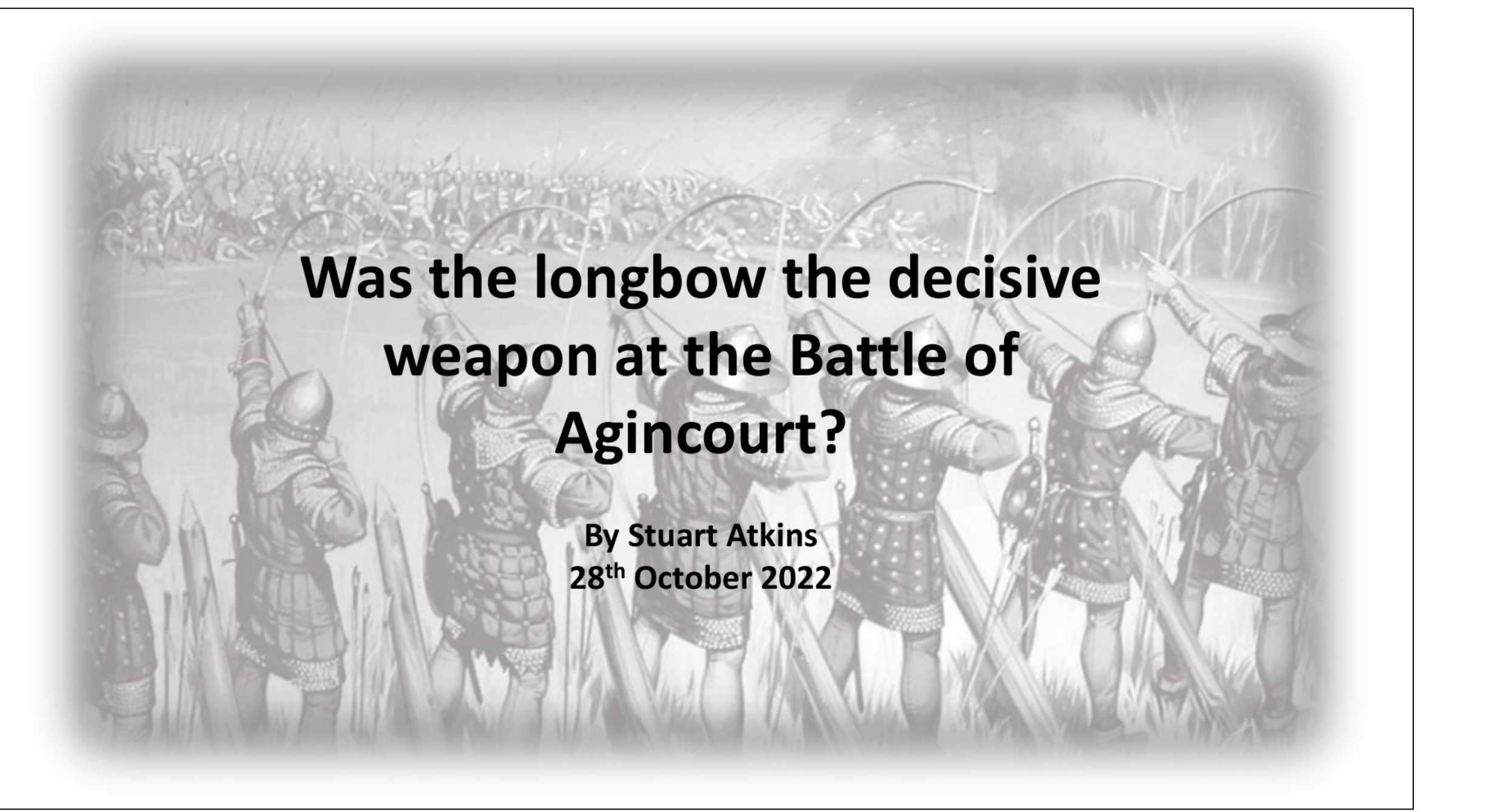
Submission date: 02-Nov-2022 11:14AM (UTC+0000)

Submission ID: 187909570

File name: 12366_Stuart_Atkins_Tech_Authoring_Presentation_Atkins_1809912_451434_4512518.pptx (12.03M)

Word count: 389

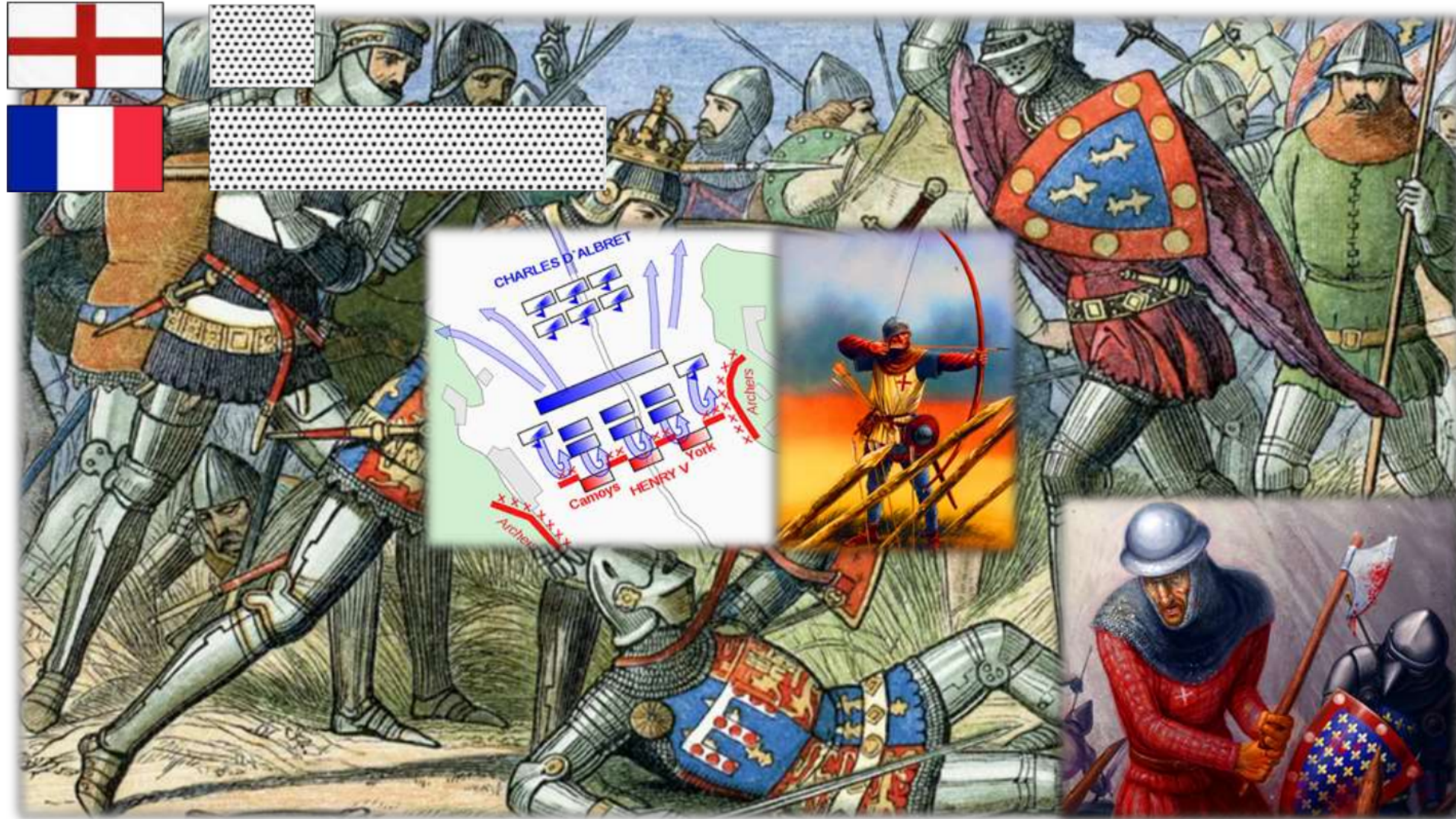
Character count: 2125



Was the longbow the decisive weapon at the Battle of Agincourt?

**By Stuart Atkins
28th October 2022**

Battle of Agincourt (October 25, 1415)



Effectiveness of the longbow – Invincible?

- Since the 16th Century, many historians have believed that the longbow weapon alone determined many victories for England, including the battle of Agincourt
- It has been claimed that arrows fired from a longbow were capable of piercing chain armour at 200m
- Longbows discovered on the Mary Rose in 1979 further reasserted this view due to the amount of 'pull' these weapons had (100-180lb)
- Evident to many historians that at the very least the longbow altered English Warfare tactics – due to many victories in the 14th /15th century

Other factors to consider

Troops



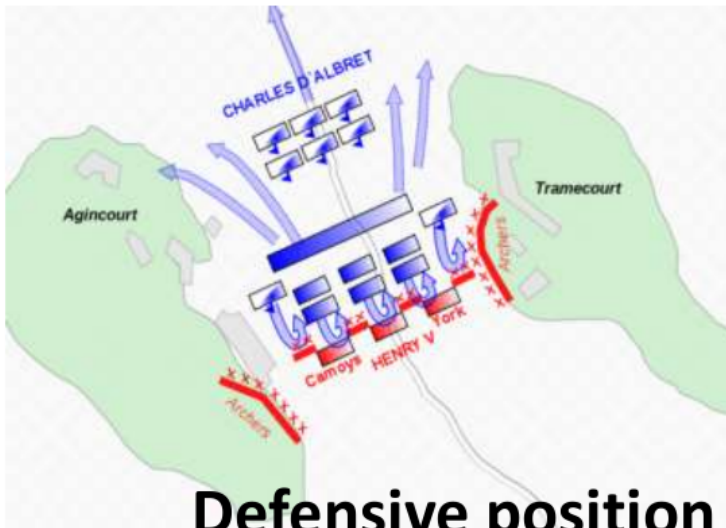
60% Knights & Nobility
40% Foot soldiers & Mercs
Preference for Crossbow

Infantry – Professional
Many armed with longbows
Few heavy cavalry

Poor leadership



Ground conditions



Defensive position



The Longbow vs Armour debate

English Longbow Testing against various armor circa 1400 By Matheus Bane January 2006



Table 6. Plate

Arrow Style	Armor Label	Test #1		Test #2	
		Body Penetration	Deformation	Body Penetration	Deformation
Needle Bodkin	M	0.5"	0"	0.5"	0"
Short Bodkin	M	0"	0.1"	0"	0.1"
Broadhead	N	0.25"	0"	0.2"	0"
Type 16 Broadhead	N	0"	0.1"	0"	0.1"

Indicates probable death - based on National Institute of Justice body armor testing for certification. 1.7" threshold for deformation (NIJ 0101.04) & 0.28" threshold for cutting penetration. (NIJ 0115.00)

The Longbow vs Armour debate

**A report of the findings of the
Defence Academy
warbow trials Part 1 - 2005**

**by Paul Bourke & David Whetham
Cranfield University / King's College,
London**



Peter Jones. 1992 – RARDE Scientific benchmark effectiveness of medieval longbow

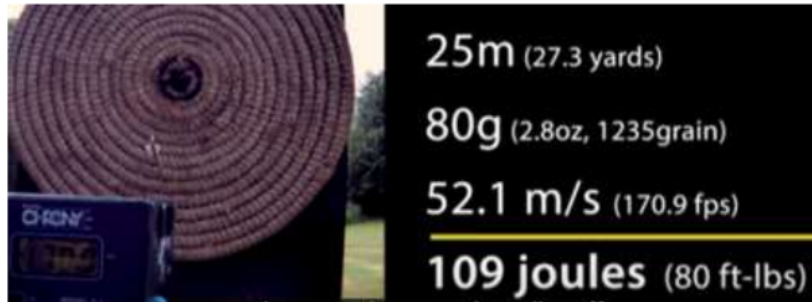
A report of the findings of the Defence Academy warbow trials Part 1 - 2005 by Paul Bourke & David Whetham. Cranfield University / King's College, London

Arrow head	Weight, g	Velocity, m/s	Target thickness, mm	Angle of obliquity, degrees	Kinetic energy, J	Penetration, mm
1 Long bodkin	71	46	0 (clay only)	0	75	100 ⁺
2 Short bodkin	70	49.68	0 (clay only)	0	86	100 ⁺
3 Lozenge	87	46	0 (clay only)	0	92	100 ⁺
1 Long bodkin	71	46	1.15	0	75	100 ⁺
2 Short bodkin	70	49.68	1.15	0	86	100 ⁺
3 Lozenge	87	46	1.15	0	92	100 ⁺
1 Long bodkin	71	46	2	0	75	—
2 Short bodkin	70	49.68	2	0	86	—
2 Short bodkin	70	49.68	2	0	86	9 ⁴
3 Lozenge	87	46	2	0	92	16
1 Long bodkin	71	46	3	0	75	—
2 Short bodkin	70	49.68	3	0	86	—
3 Lozenge	87	46	3	0	92	—
2 Short bodkin	70	49.68	1.15	10	86	82
3 Lozenge	87	46	1.15	10	92	94
2 Short bodkin	70	49.68	2	10	86	7 ⁵
3 Lozenge	87	46	2	10	92	13 ⁶
2 Short bodkin	70	49.68	1.15	20	86	82
3 Lozenge	87	46	1.15	20	92	94
2 Short bodkin	70	49.68	2	20	86	6 ⁵
3 Lozenge	87	46	2	20	92	13 ⁷
2 Short bodkin	70	49.68	1.15	40	86	85
3 Lozenge	87	46	1.15	40	92	85
2 Short bodkin	70	49.68	2	40	86	—
3 Lozenge	87	46	2	40	92	5/12 ⁸
3 Lozenge	87	46	1.15	60	92	80 ¹⁰
3 Lozenge	87	46	2	60	92	—

A report of the findings of the Defence Academy warbow trials Part 1 - 2005 by Paul Bourke & David Whetham. Cranfield University / King's College, London

Arrow head	Weight, g	Velocity, m/s	Target thickness, mm	Angle of obliquity, degrees	Kinetic energy, J	Penetration, mm
1 Long bodkin	71	46	0 (clay only)	0	75	100 ⁺
2 Short bodkin	70	49.68	0 (clay only)	0	86	100 ⁺
3 Lozenge	87	46	0 (clay only)	0	92	100 ⁺
1 Long bodkin	71	46	1.15	0	75	100 ⁺
2 Short bodkin	70	49.68	1.15	0	86	100 ⁺
3 Lozenge	87	46	1.15	0	92	100 ⁺
1 Long bodkin	71	46	2	0	75	—
2 Short bodkin	70	49.68	2	0	86	—
2 Short bodkin	70	49.68	2	0	86	9 ⁴
3 Lozenge	87	46	2	0	92	16
1 Long bodkin	71	46	3	0	75	—
2 Short bodkin	70	49.68	3	0	86	—
3 Lozenge	87	46	3	0	92	—
2 Short bodkin	70	49.68	1.15	10	86	82
3 Lozenge	87	46	1.15	10	92	94
2 Short bodkin	70	49.68	2	10	86	7 ⁵
3 Lozenge	87	46	2	10	92	13 ⁶
2 Short bodkin	70	49.68	1.15	20	86	82
3 Lozenge	87	46	1.15	20	92	94
2 Short bodkin	70	49.68	2	20	86	6 ⁵
3 Lozenge	87	46	2	20	92	13 ⁷
2 Short bodkin	70	49.68	1.15	40	86	85
3 Lozenge	87	46	1.15	40	92	85
2 Short bodkin	70	49.68	2	40	86	—
3 Lozenge	87	46	2	40	92	5/12 ⁸
3 Lozenge	87	46	1.15	60	92	80 ¹⁰
3 Lozenge	87	46	2	60	92	—

Arrows vs Armour - Medieval Myth Busting



**Range – 25m
Flat shooting**



**Mary Rose copy
160lb at 30in**



**Mary Rose copy
~1403
Wrought Iron
Hardened vs Non Hardened**



**Churburg 14 copy
~1390
1.5/2.5mm thickness
Ballistic Gel
Not fixed**

Arrows vs Armour - Medieval Myth Busting

Results

Non-case hardened arrows – very slight dents, arrows ricochet

Case hardened arrow heads – slightly bigger dents, arrows ricochet



Summary

High quality armour breast plates – Difficult to penetrate



Maille/Low quality armour – Bodkin arrows effective at killing or disabling enemy



In my opinion, the longbow was the decisive weapon at the battle of Agincourt, but not the major contributing factor to victory

But it's difficult to imagine an English victory without the longbow capability...

Importance of defensive position and terrain advantage? Surrounded by larger French force?

Multiple factors led to the French defeat

Questions?



FINAL GRADE

43/50

GENERAL COMMENTS

Instructor

Innovative and precise presentation, with clarity of thought. Understood the material properties of 14th C armour and the development of the longbow/bodkin.

Good use of Gestalt and slide spacing, with detailed referencing underpinned by peer-reviewed and non peer-reviewed examples. Was able to explain validity of any non peer-reviewed data.

Technical arguments were presented clearly, therefore making the historian and archer feel comfortable with statements that contradicted historical bias.

Consider increasing the size of technical referencing used in the Paul Bourke slides (slides 7 and 8) - it was hard to read the relevant extracts from a distance. Spot on for time - 10 minutes - thereby allowing historian time for questions.

Overall, Mr Atkins was the most competent and professional in meeting the requirements of the assignment. He delivered technical information to a historian, thereby allowing that historian to review and correct case material regarding the Battle of Agincourt. Well done indeed.

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7

PAGE 8

PAGE 9

PAGE 10

PAGE 11

PAGE 12