

4603 Compass Point Road Belcamp, MD 21017

# Preliminary Data

# **BALLISTIC RESISTANCE TEST**

# Element U.S. Space & Defense -Belcamp

4603B Compass Point Road Belcamp, MD 21017 Client: Delta Defense Technology Inc Project No.: PH00014074

> Test Date: 01/23/2025 Page 1 of 1

**Test Panel** Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc Sample No.: (APM2, V0) Sample 1

Size: 9.75 x 11.50 in

Avg. Thickness: N/A Thicknesses: N/A

Weight: 7.510 lbs Plies/Laminates: N/A

Date Received: 01/06/2025 Received Via: FEDEX, Express

Saver Returned Via: FEDEX, Express

Saver

### Setup

Shot Spacing: NIJ-STD-0101.07

Level RF3

Witness Panel: Clay Backing Material: 5.5-in clay/plywood

Condition: Conditioned per

ASTM-3078M-23

Primary Vel. Screens (ft): 5.000, 5.333, 19.666, 20.000

Primary Vel. Location (ft): 12.500

Range to Target (ft): 25.000 Target to Witness (in): 0.000 Range No.: Range 1

Temp: 73.4 °F BP: 30.2 inHg RH: 42 %

Barrel/Gun: WC078634 Gunner: George Ramming Recorder: Isaiah Lookingbill

#### **Ammunition**

Projectile	Lot No.	Manufacturer	Powder		
(1) .30-06 cal, 166-grain APM2	TW45	Military	N133		

### **Applicable Standards or Procedures**

Clay Drop 1 - Drop Time: 1:55 PM; Block No. WC074194; Temp: 95.3 °F; Drop Depths: 19.2 mm,19.2 mm,19.9 mm,17.6 mm

- (1) NIJ-STD-0101.07 Level RF3 (Modified)
- (2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	43.0	164	5180	2896	4950	2896	2896	None	36.7	0	
2	1	43.0	164	5163	2905	4933	2906	2905	None	37.6	0	
3	1	43.0	164.1	5158	2908	4928	2908	2908	None	42.6	0	

Remarks:

Required Velocity: 2850-2910 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Footnotes:

# **BALLISTIC RESISTANCE TEST**

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> Test Date: 01/23/2025 Page 1 of 1

**Test Panel** | **Description:** Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc Sample No.: (APM2, V0) Sample 2

Size: 9.75 x 11.50 in

Avg. Thickness: N/A Thicknesses: N/A

Weight: 7.520 lbs Plies/Laminates: N/A

Date Received: 01/06/2025 Received Via: FEDEX, Express

Saver Returned Via: FEDEX, Express

Saver

### Setup

Shot Spacing: NIJ-STD-0101.07

Level RF3

Witness Panel: Clay Backing Material: 5.5-in clay/plywood

Condition: Conditioned per

ASTM-3078M-23

Primary Vel. Screens (ft): 5.000, 5.333,

19.666, 20.000 Primary Vel. Location (ft): 12.500

Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 1 Temp: 73.8 °F

BP: 30.2 inHg RH: 43 % Barrel/Gun: WC078634

Gunner: George Ramming
Recorder: Isaiah Lookingbill

#### **Ammunition**

Projectile	Lot No.	Manufacturer	Powder
(1) .30-06 cal, 166-grain APM2	TW45	Military	N133

### **Applicable Standards or Procedures**

Clay Drop 1 - Drop Time: 1:55 PM; Block No. WC074194; Temp: 95.3 °F; Drop Depths: 19.2 mm,19.2 mm,19.9 mm,17.6 mm

- (1) NIJ-STD-0101.07 Level RF3 (Modified)
- (2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes	
1	1	43.0	164	5239	2863	5000	2867	2865	None	36.6	0		ĺ
2	1	43.0	164.9	5156	2909	4925	2910	2910	None	43.3	0		ĺ
3	1	43.0	164	5165	2904	4935	2904	2904	None	37.5	0		l

Remarks:

Required Velocity: 2850-2910 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Footnotes:

# **BALLISTIC RESISTANCE TEST**

### Element U.S. Space & Defense -Belcamp

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Client: Delta Defense Technology Inc Project No.: PH00014074

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**Test Panel** Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc Sample No.: (APM2, V0) Sample 3

Size: 9.75 x 11.50 in

Avg. Thickness: N/A Thicknesses: N/A

Weight: 7.500 lbs

Plies/Laminates: N/A

Date Received: 01/06/2025 Received Via: FEDEX, Express

Saver Returned Via: FEDEX, Express

Saver

Setup

Shot Spacing: NIJ-STD-0101.07

Level RF3

Witness Panel: Clay Backing Material: 5.5-in clay/plywood

Condition: Conditioned per

ASTM-3078M-23

Primary Vel. Screens (ft): 5.000, 5.333, 19.666, 20.000

Primary Vel. Location (ft): 12.500

Range to Target (ft): 25.000 Target to Witness (in): 0.000

Range No.: Range 1

Temp: 73.8 °F BP: 30.2 inHg RH: 42 %

Barrel/Gun: WC078634 Gunner: George Ramming Recorder: Isaiah Lookingbill

#### **Ammunition**

Projectile	Lot No.	Manufacturer	Powder
(1) .30-06 cal, 166-grain APM2	TW45	Military	N133

### **Applicable Standards or Procedures**

Clay Drop 1 - Drop Time: 2:30 PM; Block No. WC074194; Temp: 94.8 °F; Drop Depths: 19.7 mm,19.1 mm,20.6 mm,20.2 mm,18.1 mm

- (1) NIJ-STD-0101.07 Level RF3 (Modified)
- (2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	43.0	163.8	5163	2905	4933	2906	2905	None	36.1	0	
2	1	43.0	163.4	5154	2910	4924	2911	2911	None	36.9	0	
3	1	43.0	163.6	5135	2921	4905	2922	2922	None	41.2	0	

Remarks:

Required Velocity: 2850-2910 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Footnotes:

# **BALLISTIC RESISTANCE TEST**

# Element U.S. Space & Defense -Belcamp

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**Test Panel** | **Description:** Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc Sample No.: (APM2, V0, Wet) Sample 4

Size: 9.75 x 11.50 in

Avg. Thickness: N/A Thicknesses: N/A

Weight: 6.560 lbs

Plies/Laminates: N/A

Date Received: 01/06/2025 Received Via: FEDEX, Express

Saver Returned Via: FEDEX, Express

Saver

### Setup

Shot Spacing: NIJ-STD-0101.07

Level RF3

Witness Panel: Clay

Backing Material: 5.5-in clay/plywood

Condition: Conditioned per

ASTM-3078M-23 followed by submersion per Appendix A.

Primary Vel. Screens (ft): 5.000, 5.333, 19.666, 20.000

Primary Vel. Location (ft): 12.500

Range to Target (ft): 25.000 Target to Witness (in): 0.000 Range No.: Range 1

Temp: 73.8 °F BP: 30.2 inHg RH: 41 %

Barrel/Gun: WC078634
Gunner: George Ramming
Recorder: Isaiah Lookingbill

#### **Ammunition**

Projectile	Lot No.	Manufacturer	Powder
(1) .30-06 cal, 166-grain APM2	TW45	Military	N133

#### **Applicable Standards or Procedures**

Clay Drop 1 - Drop Time: 2:30 PM; Block No. WC074194; Temp:  $94.8\,^{\circ}F$ ; Drop Depths: 19.7 mm,19.1 mm,20.6 mm,20.2 mm,18.1 mm

- (1) NIJ-STD-0101.07 Level RF3 (Modified)
- (2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	43.0	164	5158	2908	4926	2910	2909	None	26.8	0	
2	1	43.0	163.8	5178	2897	4944	2899	2898	None	35.5	0	
3	1	43.0	163.4	5169	2902	4939	2902	2902	None	36.1	0	

Remarks:

Required Velocity: 2850-2910 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Wet per NIJ 07

Footnotes:

# **BALLISTIC RESISTANCE TEST**

### Element U.S. Space & Defense -Belcamp

4603B Compass Point Road Belcamp, MD 21017 Client: Delta Defense Technology Inc Project No.: PH00014074

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**Test Panel** Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc Sample No.: (APM2, V0, Wet) Sample 5

Size: 9.75 x 11.50 in

Avg. Thickness: N/A Thicknesses: N/A Weight: 6.550 lbs

Plies/Laminates: N/A

Date Received: 01/06/2025 Received Via: FEDEX, Express Saver

Returned Via: FEDEX, Express

Saver

### Setup

Shot Spacing: NIJ-STD-0101.07

Level RF3 (Modified)

Witness Panel: Clay

Backing Material: 5.5-in clay/plywood

Condition: Conditioned per

ASTM-3078M-23 followed by submersion per Appendix A.

Primary Vel. Screens (ft): 5.000, 5.333, 19.666, 20.000

Primary Vel. Location (ft): 12.500

Range to Target (ft): 25.000
Target to Witness (in): 0.000

Range No.: Range 1

Temp: 74.2 °F BP: 30.2 inHg RH: 43 %

Barrel/Gun: WC078634
Gunner: George Ramming
Recorder: Isaiah Lookingbill

### **Ammunition**

Projectile	Lot No.	Manufacturer	Powder		
(1) .30-06 cal, 166-grain APM2	TW45	Military	N133		

#### **Applicable Standards or Procedures**

Clay Drop 1 - Drop Time: 3:02 PM; Block No. WC074195; Temp: 92.4 °F; Drop Depths: 18.9 mm,17.4 mm,18.4 mm,16.6 mm,19.1 mm

- (1) NIJ-STD-0101.07 Level RF3 (Modified)
- (2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	43.0	163.3	5178	2897	4944	2899	2898	None	24.1	0	
2	1	43.0	163.5	5195	2887	4961	2889	2888	None	41.6	0	
3	1	43.0	163.1	5226	2870	4987	2874	2872	None	33.4	0	

Remarks:

Required Velocity: 2850-2910 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Wet per NIJ 07

Footnotes:

# **BALLISTIC RESISTANCE TEST**

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**Test Panel** Description: Torso plate tested stand alone.

Manufacturer: Delta Defense Technology Inc Sample No.: (APM2, V0, Wet) Sample 6

Size: 9.75 x 11.50 in

Avg. Thickness: N/A Thicknesses: N/A Weight: 6.530 lbs Dat

Plies/Laminates: N/A

Date Received: 01/06/2025 Received Via: FEDEX, Express Saver

Returned Via: FEDEX, Express

Setup

Shot Spacing: NIJ-STD-0101.07

Level RF3 (Modified)

Witness Panel: Clay

Backing Material: 5.5-in clay/plywood

Condition: Conditioned per ASTM-3078M-23

followed by submersion per Appendix A.

Primary Vel. Screens (ft): 5.000, 5.333, 19.666, 20.000

Primary Vel. Location (ft): 12.500

Range to Target (ft): 25.000 Target to Witness (in): 0.000 Range No.: Range 1

Temp: 74.2 °F BP: 30.2 inHg RH: 43 %

Barrel/Gun: WC078634 Gunner: George Ramming Recorder: Isaiah Lookingbill

### **Ammunition**

Projectile	Lot No.	Manufacturer	Powder
(1) .30-06 cal, 166-grain APM2	TW45	Military	N133

### **Applicable Standards or Procedures**

Clay Drop 1 - Drop Time: 3:02 PM; Block No. WC074195; Temp:  $92.4\,^{\circ}F$ ; Drop Depths:  $18.9\,$  mm, $17.4\,$  mm, $18.4\,$  mm, $16.6\,$  mm, $19.1\,$  mm

- (1) NIJ-STD-0101.07 Level RF3 (Modified)
- (2) Customer Request

Shot No.	Ammo	Powder/ Seating	Weight (gr)	Time 1 (µs)	Vel. 1 (ft/s)	Time 2 (µs)	Vel.2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Deformation (mm)	Obliq. (°)	Footnotes
1	1	43.0	163.7	5200	2885	4965	2887	2886	None	19.2	0	
2	1	43.0	163.6	5226	2870	4991	2872	2871	None	31.6	0	
3	1	43.0	164.1	5178	2897	4944	2899	2898	None	34.1	0	

Remarks:

Required Velocity: 2850-2910 ft./s.

Projectile Yaw Check: 0° Yaw on All Impacts.

Wet per NIJ 07

Footnotes: