PRECISION, PEOPLE AND TECHNOLOGY

.338 Lapua Magnum
A “New” Cartridge Comes of Age

NDIA Joint Services Small Arms Systems
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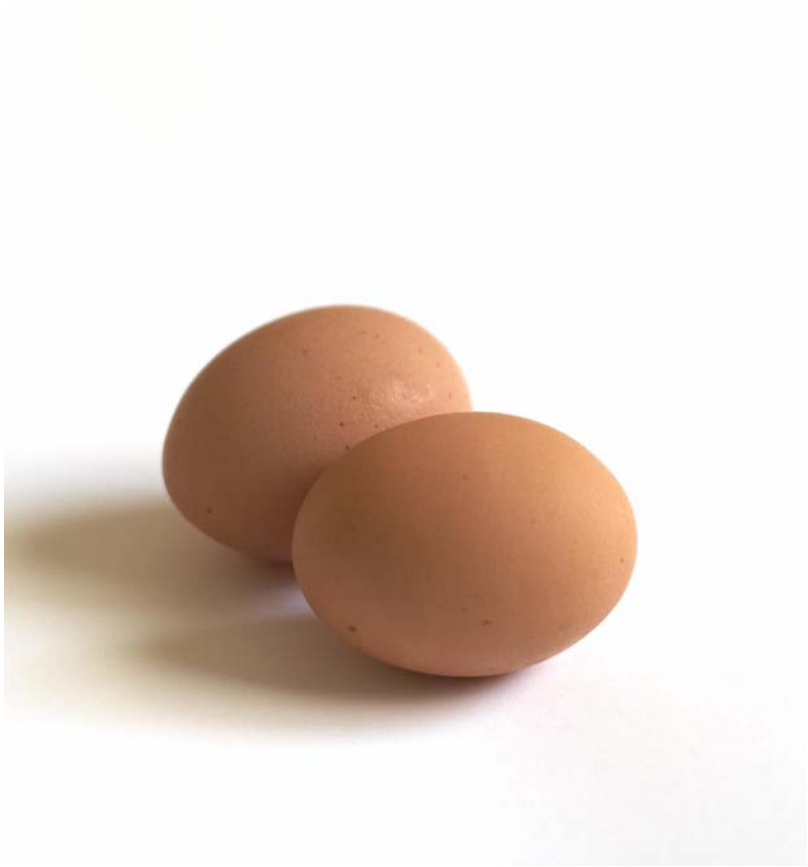
Bruce Webb, VP Marketing

Nammo

A New Caliber: Which Came First, The Weapon or the Ammo?



The Challenge: Portable Sniping Power

There is a big gap between the common calibers

7.62mmx51 (.308 Win)

- 12lb weapon
  - + Optics
  - + Ammo (M118LR)
- 900m Range
- 175gr projectile

.50 cal (12.7mmx99)

- 30lb weapon
  - + Optics
  - + Ammo (Mk211)
- 1500m Range
- 650gr projectile + MP

US Military Addressed Gap In 1982

Requirement (machine gun, semi-auto & sniper)

- Pre-”SOCOM” units defined need
- Launch 250gr projectile at 3000 fps
- Range 1500m (like .50cal)

NSWC Crane Manager

Research Armament Company lead (gun)

- Brass Extrusion Labs Limited (cartridge case)
- Hornady (projectile)

Armament Research Corporation's "Haskins Rifle" was the Star

- Jerry Haskins' (AR) gun was well received
  - Simplified Action was working in .300 Win Mag and .50 BMG
- ".416-.338" napkin design based on .416 Rigby
  - Ed Dillon designed preliminary mods for .338/.416
  - Boots Obermeyer (barrels) refined interfaces
  - Jim Bell solved cartridge issues & made 'conversion' tooling
- Lapua was chosen as a production partner
  - Agreement made at the 1984 SHOT Show
  - Based on the .416/338 being the "Next Big Thing"

Late 1984, System Problems Surfaced

- Recurring “Headspace” problems
  - Caused by oversize bullet w/Haskins bolt design [Dillon]
- US Military continued with Haskins
  - .300 Win Mag
  - .50 cal
  - but dropped the 416/338
- Lapua, who had signed on for “production” was left at the dance without a date

Lapua Adopted the Program “Alone”

Promises of Production Quantities Faded

Lapua made further refinements (1984-1985)

- Increased web thickness (possible “from scratch”)
- Increased taper (still thinking about machine guns)

Heym (Germany) made .338 ‘semi-custom’ guns (1985)

- Heym’s ’98 style actions solved AR’s problems
- Competitive long-range shooters choose .338 Lapua Mag

Late 1980’s Accuracy International developed a .338 Weapon

- Malcolm Cooper (AI) represented Lapua in Britain
- Developed the Arctic Warfare weapon in 7.62mm and .300 Win Mag
- Migrated the AW to .338 Lapua Magnum become the first production

SAKO had provided test barrels to Lapua, followed

- Fields the TRG-41 in .338 Lapua magnum

.416 Rigby Becomes .338 Lapua Mag

Comments:

Accommodates large, heavy projectile (300-400 grain) for “Dangerous Game”

- Mouth =.416”
- Length = 2.90”
- Volume =122gr H_2O

Comments:

Increased taper for improved extraction

Increased web for higher pressure up to 60,915 psi (420 MPa)

- Mouth = .338”
- Length = 2.72”
- Volume =114gr H_2O

Interesting Things at SOCOM in 2007

.338 Lapua Mag Timeline

1982	.416-.338 Concept (250gr x 3000 fps)
1983	USN/Research Armaments (Haskins)/ BELL (Bell)/Hornaday
1984	SHOT Show Agreement (ARC/Lapua)
1985	Heym (Germany)/Mauser/Lapua
1986	416/338 Begins Winning Competitions
1988	Accuracy International “Production”
1989	CIP Registration
1990 - 2004	Long Range Competitors and European Snipers choose .338 Lapua Magnum
2004 - 2007	Renewed US Sniper Use/Interest
2007	SAAMI Introduction
2007	US Military Qualification Planned ?

The Result: A Refined Example

- 8lb weapon
  - + Optics
  - + Ammo
- 1500m Range
- 250gr projectile

.338 Lapua Magnum Growing “Family”

Weapons:

- Accuracy Int’l AWSM/AWP (UK)
- SAKO TRG -42 (Finland)
- Timberwolf PGW (Canada)
- Remington M24A3
- SIG Blaser LRS2 (Switzerland)
- Many Others

Ammunition:

- Lapua
- Norma
- RUAG
- Black Hills

Countries:

- Australia
- Belgium
- Britain*
- Canada
- Finland*
- Germany
- Ireland
- Netherlands
- Norway
- Singapore
- Switzerland
- United States

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