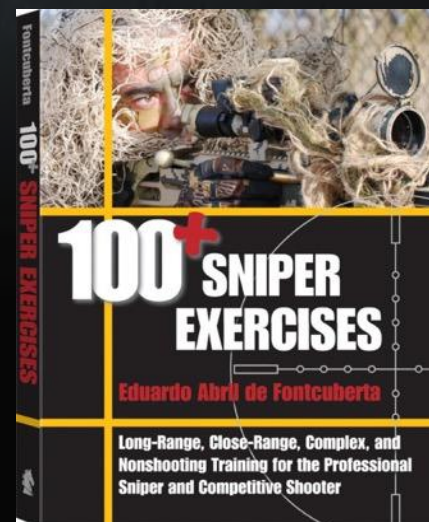


# MARITIME SNIPER OPERATIONS AT 2000M A NEED or A GOAL ? SNIPER FUTURE IN MARITIME ENVIRONMENT

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Master Diver*

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**Eduardo Abril de Fontcuberta**  
**Spanish Foreign Legion SF**

# 2000m Maritime Sniping

Is there a **NEED** for it?

Can we ID the target at 2K?  
Or engage at 2K with our ROEs?



**Not really .... BUT?**



# A 2000m capable sniper is deadly accurate at 1000m, even in a marine environment

- Counter piracy
- WOT
- Hostage Rescue
- Port protection
- Ship perimeter
- Critical Infrastructure Protection
- Dept. of the NAVY DON CIP /NIVA



2000m capable sniper as a goal?

SURE !!

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# The “OLD” problem:

Snipers providing safety and support for:

- VBSS and HVBSS operations
- Counter Sniper Overwatch operations
- Surgical Intercept and Disable Fire
- On-board protection of vessels
- Observation of target is limited for RHIB teams
- Protection of Ports
- Protection of vessels in Port
- Counterpiracy perimeter





FARS NEWS AGENCY

Highly trained snipers from WOT area of operations and Siria:

- New .50 cal capability
- New highly skilled operators
- New strategic soft targets
- New tactics

**The NEW threats**

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# What we had?

- Small caliber weapons : M4 variants (5.56x45NATO)
- Medium caliber weapons: SWS & SASS & LMG (7.62x51 NATO)
- Large caliber weapons: SWS & HMG (12.7x99 NATO)
- Optics? For Target ID
- No advanced ballistic soft for engaging moving targets with precision fire at long range

**Was it enough for all missions?**

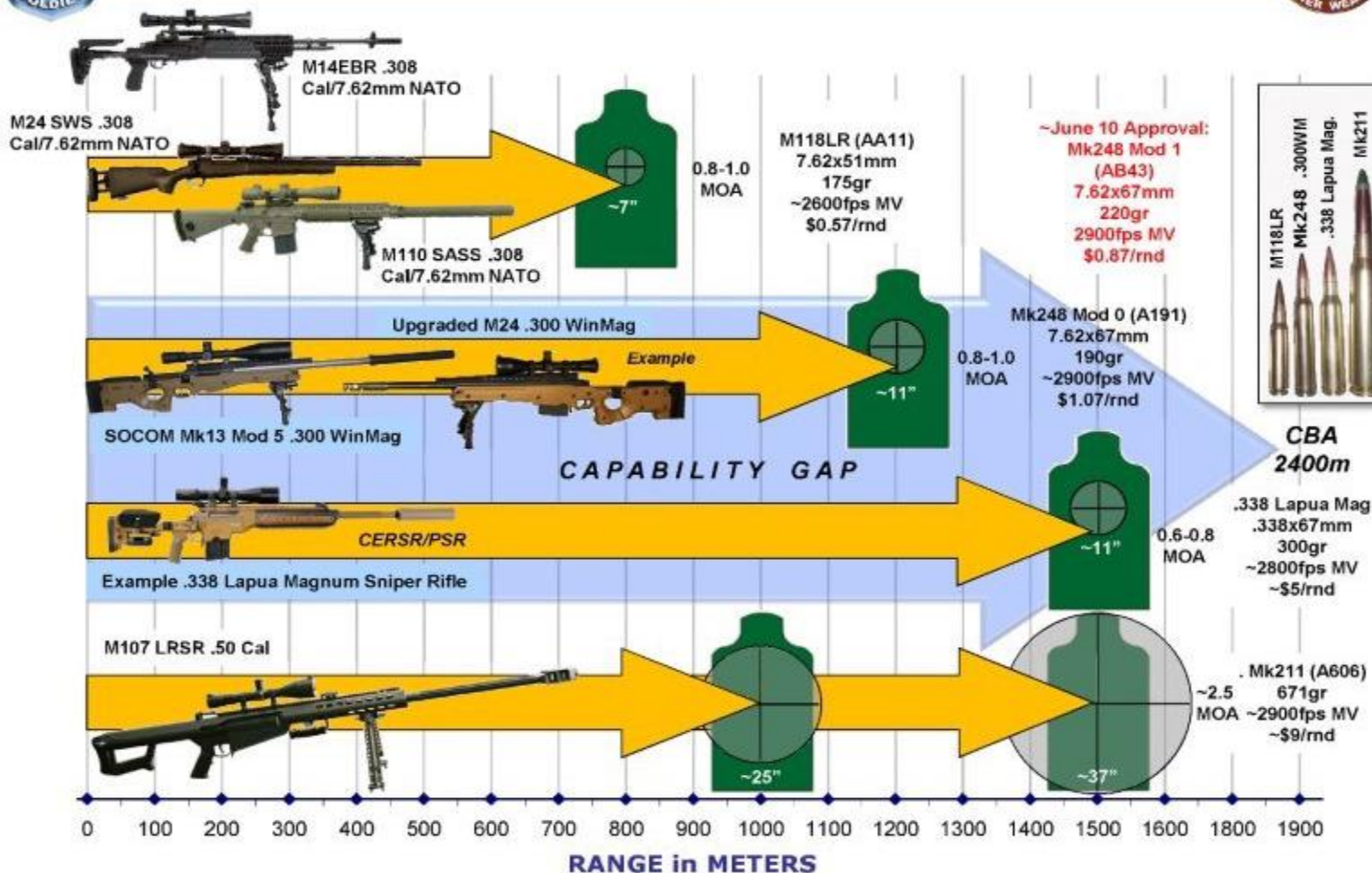
**I dont think so !!**



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# Precision Weapon Portfolio Engagement Ranges & Dispersion

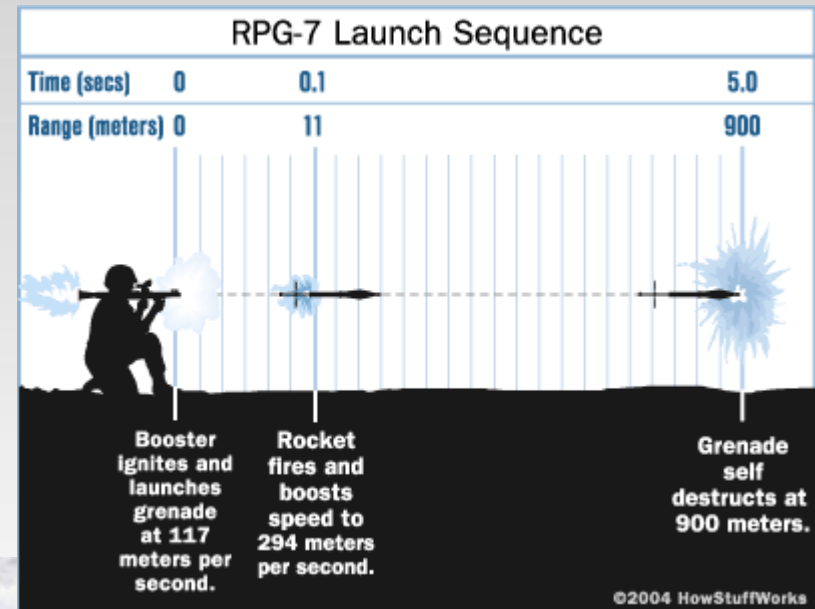


Not even for for counterpiracy? [Opening video](#)

# What they had? AK47 & RPG7

- Not accurate BUT still a threat for a large vessel
- No large optics.
- 500m or less range

Dist.	Percent
50 m	100%
100 m	96 %
200 m	51 %
300 m	22 %
400 m	9 %
500 m	4 %



# NOW they “can” shoot at 1000m too ?

- Fortmeier/Steyr clones
  - Captured Barretts
  - Captured CADEX
  - NOW they have capable weapons
- 
- **Maybe not “as” accurate as NATO standards, but a threat.**
  - Especially from estable platforms like ports or large vessels





**AT PORT :**

**Perimeter? Port safety?**

**AT SEA :**

**Threats from large motherships?**

**Skiffs as platform of accurate fire?**

- ROES?
- Target ID?
- Threat ID?
- Accuracy?
- Collateral damage?



# The Solution:

Increase our OWN  
capabilities :  
FOR



- Surgical Fire from stable platforms at 1500+m
- Support and Security of Assault teams at 500m
- Antimaterial “antiskiff” HTI capabilities up to 1000m
- Observation/Overwatch with high power optics
- Perimeter Safety    Observation + Precision Fire
- Best view of target: Snipers are the ships eyes !!

# Advantages:

- Extra safety for teams
- Low Collateral Damage
- Enhanced Command
- Optics advantage
- Surgical Elimination
- Disabling MP Fire / Incendiary effect
- Low Cost per engagement
- Be able to work outside RPG range





# Disadvantages :



- Sniping is a VERY complex tactical role
- VERY reliant on high level of training
- VERY reliant on specialized equipment- Ballistics
- Skill level is perishable
- High cost of maritime sniper training

# Current equipment ?

No better than in 2012



- No long range observation capabilities
- Not the best suited for the role.
- Inaccurate even at medium range?
- Is it a liability? No target ID, possible collateral damage
- Low terminal effects?





## On these Scenarios?

Would you attempt these shots with your current equipment and sniper training ?

With restricting ROES !!!  
And media attention !!!



AS SNIPERS: Are we really capable of supporting operations?

Can we operate outside RPG range? 500m+

**Current capabilities ?**



**BARRETT.**

# YES WE CAN ! Well.... Some can

Can we be, even better ? Yes SIR !! ALL OF US



03:59:40

ScanEagle

EO

ID

678



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# Can we enhance maritime sniper training to acquire those capabilities?



- New equipment
- Structured training
- Integration with Tactical Boat Crews
- Crosstraining



# 1000-YD TOP GUN

The .50-caliber Hunter Class champ offers up strategies for going long and strong.

By Eduardo Abril de Fontcuberta

**I**f you are a sniper, you like to shoot far. If you are an operator, you may need to shoot far. In both cases, the skill of long-range shooting is something desirable, and it may save your life.

There are two competitions that involve shooting long-range with equipment similar to what a tactical operator or sniper uses every day: 1,000-yard F-T/R matches with a .308 and Fifty Caliber Shooter's Association (FCSA) Hunter Class matches with a .50 BMG. I got involved in both types of shooting three years ago. The road has been full of challenges and learning experiences, but I have fulfilled many personal goals and am extremely satisfied.

Apart from competing in the last World Championships for both F-T/R and FCSA, I was lucky enough to win the 2011 Hunter Class Score .50-caliber World Championship held at the NRA Whittington Center in New Mexico. Let me share my experience and some humble advice to any shooter who wants to join the sport.

## GEARING UP

What is FCSA Hunter Class .50-caliber shooting? Well, basically, it is the same as F-T/R shooting, but on steroids. It involves shooting a more or less standard rifle, prone, with a bipod and a "flexible" rear rest. The targets for FCSA 1,000 yard-competitions have a 1-MOA 10-ring and a 0.5-MOA X-ring for ties. The F-T/R targets are similar to these.

For a Spaniard like me, in whose country owning a .50-caliber rifle is not allowed, just shooting a rifle this big is a hell of a task. I had very little training and did not have many opportunities to reload the rifle, as I had it on loan only. If you live in one of the .50-caliber-friendly countries: lucky you! Anyway, the best way to give you some advice in how to start shooting out to 1,000 yards with a .50-caliber rifle is to tell my own story. I started shooting these rifles in a military environment. Then I realized that the best .50-caliber shooters were competing in the U.S. at FCSA matches, so I thought, "Let's go there and learn how to shoot those 1.9-inch five-shot groups!"

FCSA target shooting, prone with a military rifle, focuses on acquiring extreme long-range accuracy and wind-coping skills that will improve your sniping. With the right gear, skill, and patience, anyone can make impossibly long .50-caliber shots.

**WE know we can shoot 1  
MOA at 1000 m  
BUT  
What about 2000m?**



- King of 2 Miles was born as a test of current state of the art sniper systems
- By reaching 2 Miles we also HUGELY INCREASE hit probability at 2000m.
- NOW we know we can hit consistently at 2000m



# King of 28 miles

**350gr Solid Bullets**



**Compare .375 Cheytac  
to .308 Win**

**Pushing the  
envelope of current  
tecnology**

**2 Miles = 3520y**

**2 Miles = 3218m**

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## Application to Maritime sniping

- Extended perimeter
- More Lethal
- More Accurate
- More Rugged
- Deadly as Counter sniper from stable platforms
- High speed bullets optimum for moving targets





CUTTING EDGE  
BULLETS

Deadly accurate at one mile

1500 YDS

MTH .375 350GR  
375 CHEYTAC

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# 1920 yards



**Good target ID at 2000Y  
a weapon could be seen**



# 3000 yards

- Observation of threat is even MORE important than engagement
- Hit probability LOW - BUT possible
- Huge psychological effect in Pirates or Terrorists
- Near miss at 3000 allows shooter to be ready for HITS at 2000.
- Target ID critical but possible
- Gives time to protection team to protect perimeter.
- Ballistic software and calculations required



# MARITIME SNIPING AT LONG RANGE



## MY PROPOSAL



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# The 2K maritime sniper program

FOUR LEG APPROACH:



STEP 1: Advanced Ballistics Software Suite

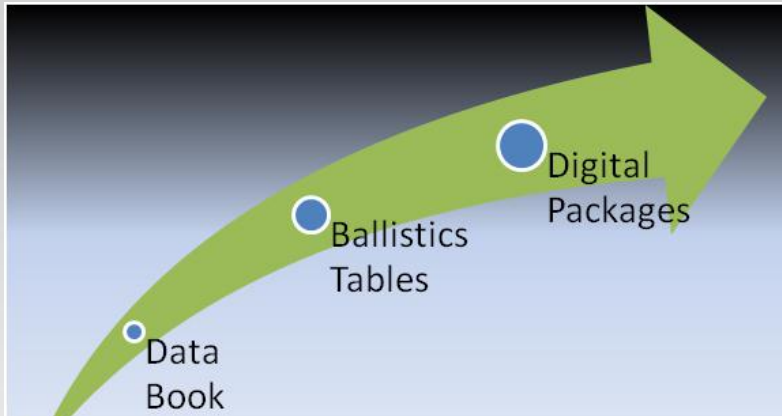
STEP 1: Upgraded Rifles and Optics

STEP 2: Dedicated advanced training

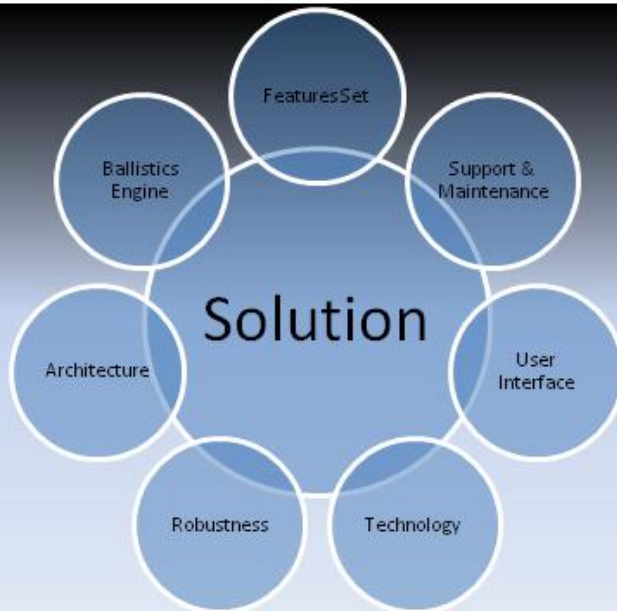
STEP 3: Adequate Ammunition



# STEP 1: Advanced Ballistic Suite



- Extreme range accurate fire solutions
- Moving target capable
- Moving target + Moving shooter capable
- Extreme angle shooting capable



## Patagonia Ballistics ColdBore 1.0

# Advanced capability in Land and at Sea

ColdBore 1.0 -> Ballistics -> Solution

## shoot! settings

Ruger KM77RP (22") - BARNES TSX-BT

<b>Elevation</b>	<b>Windage</b>	<b>Lead</b>
3.3 Up	5.9 Right	19.2 Right

Mach 1.99  
Supersonic

MOA

<b>Range</b>	Meters	+	-
390			
<b>Wind Ang</b>	Degrees	+	-
90°			
<b>Wind Vel</b>	Miles/Hour	+	-
15.0			

Navigation icons: Home, Settings, Bar Chart, More

ColdBore 1.0 -> Ballistics -> Tools

## reticle hold data

Ruger KM77RP (22") - BARNES TSX-BT

Meters

MOA scale 14x / 16x

Reticle's list

Burris\_Ballistic\_Mil\_Dot

ColdBore 1.0 -> GPS -> Main

## map status gps

Tap and hold on any Map location to add a Geopoint

Navigation icons: Play, Stop, Home, Location, More



## STEP 2: Upgraded rifles and optics

- Rifle Systems with 1 MOA or better performance
- Riflescopes with high magnification 5-25X
- Ballistics and LRF in scope
- Thermal and Night Vision
- Spotting scopes 40 to 60X



# Maritime Sniper Rifles for ELR Operations



- More Accurate
- Tactically Focused – Purpose built
- Marine environment ready
- Extended range- Up to 2000m and more !!!
- MRAD and SSG08A1 338LM antipersonnel rifle
- M107A1 .50 BMG semiauto antimaterial rifle
- Steyr HS50M1 .460 &.50 Bolt action antimaterial rifle



# 40 to 60X SPOTTING SCOPES make target ID possible

- Weapon can be seen
- Threat can be confirmed
- Can be engaged



# STEP 3 : Specific Advanced Training



- For the snipers
- For the boat crews
- For the assault teams
- For the protected GOPLAT/  
SHIP



TECNOSUB

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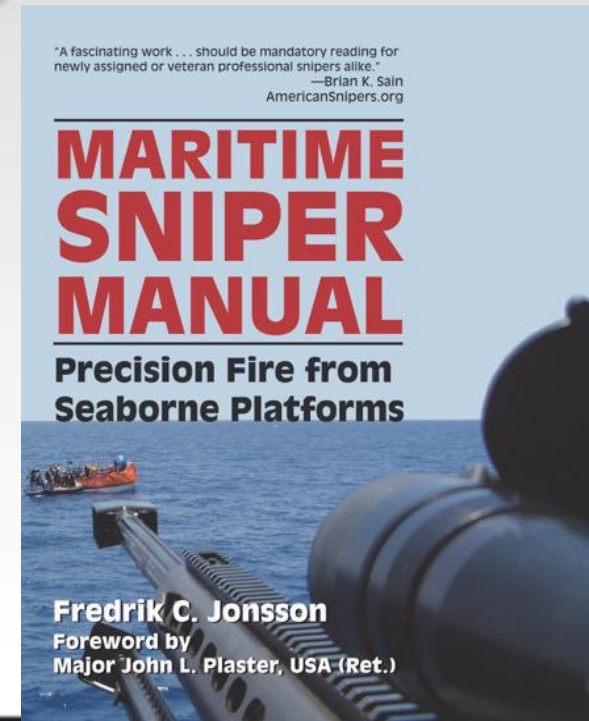
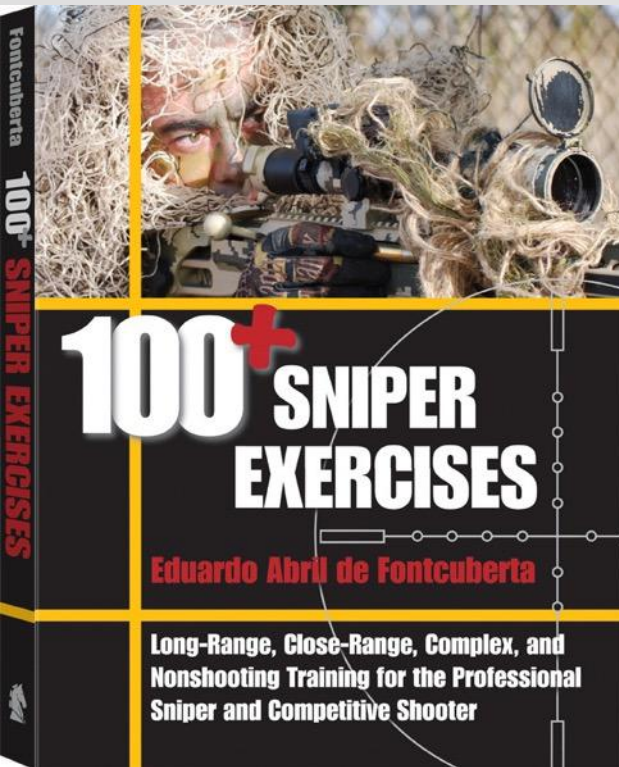
# Structured Maritime-Sniper Training

New and MUCH more advanced training systems

TRAIN BOAT AND  
PROTECTION TEAMS  
IN SNIPING

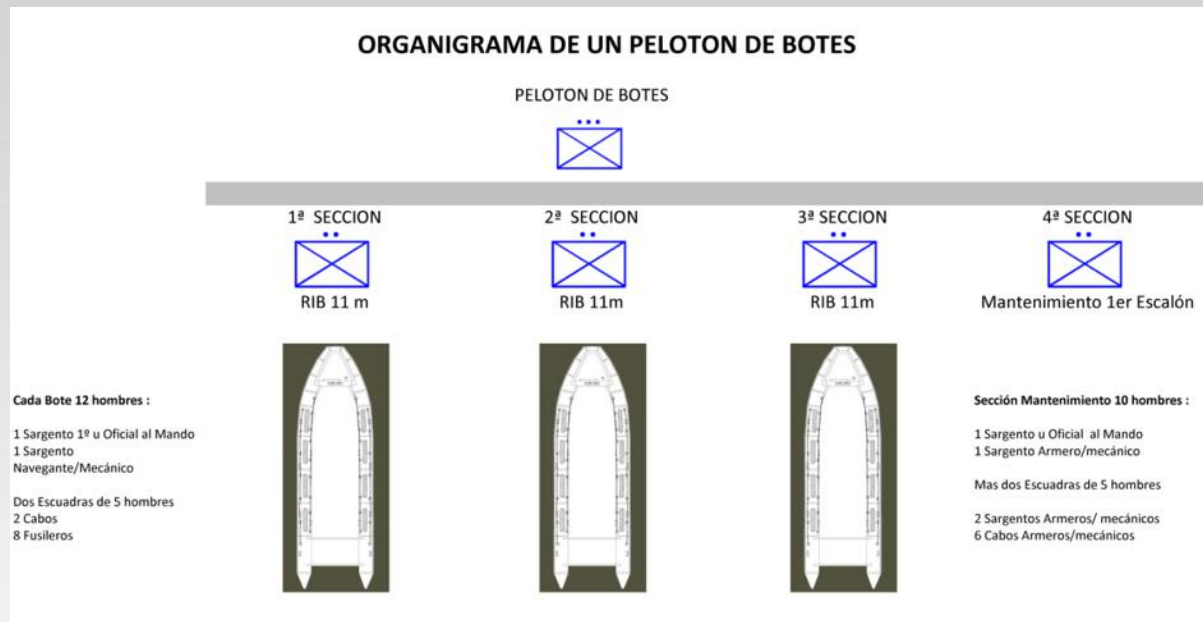
OR

TRAIN SNIPERS IN  
BOAT OPERATIONS



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# Sniper training for boat crews and for ship protection teams?



- How snipers operate: TRUST, UNDERSTAND, HELP them
- Communications – Fire coordination
- How to react when supported by sniper fire
- What are their capabilities – BALLISTIC complications



# OR

## Maritime training for the Snipers?

COMM

RADAR OPS

NAVIGATOR

OBSV. SNIPER

CT OPS

COMBAT DIVER

PILOT

HSB PILOT

SNIPER

***IT DEPENDS ON BOAT CREWS***

***IT DEPENDS ON THE SNIPERS MISSION***

***BUT OVER ALL....***

***DEPENDS ON THE BUDGETS AND SCHEDULE***



**TECNOSUB**

***HighSpeedBoat  
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# TOO MUCH ? Not so, if



- PERFORMANCE BASED TRAINING
- CROSS TRAIN IN CORE SKILLS
- STRUCTURED TRAINING PROGRAM
- KEEP ROLES **BUT** CROSS TRAIN

***AS BUDGET/SCHEDULE ALLOWS  
SEEK COMPLETE BASIC TRAINING OF ALL  
OPERATORS***



# STEP 4 : Sniper Grade Ammo

## Requirements for Mission Oriented Ammo

- Highly Accurate (1 MOA max)
- Terminal Effects
  - Penetrating API & SOLID
  - Explosive-Frag-Incendiary
- Flexible
- Can be used with current equipment issued



NAMMO RAUFOSS 12,7x99mm (cal .50 BMG)  
& TIER 1 – SOLID LOADED SNIPER AMMO

# Sniper Grade Ammo Requirements

- **COMMERCIAL**
- **RELOADED**
  - Custom loads
  - In-House reloads



NAMMO RAUFOSS 12,7x99mm (cal .50 BMG)  
TIER 1 – SOLID LOADED SNIPER AMMO



# New HIGH BC solids



**ULTRA ACCURATE  
AP TERMINAL BALLISTICS**

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# As loaded ammo or bullets to load

[www.thunderammo.com](http://www.thunderammo.com)

[www.cuttingedgebullets.com](http://www.cuttingedgebullets.com)



- BC G1 1.040 .375 /450gr
- BC G1 0.970 .50/798gr
- BC G1 0.955 .408/415gr



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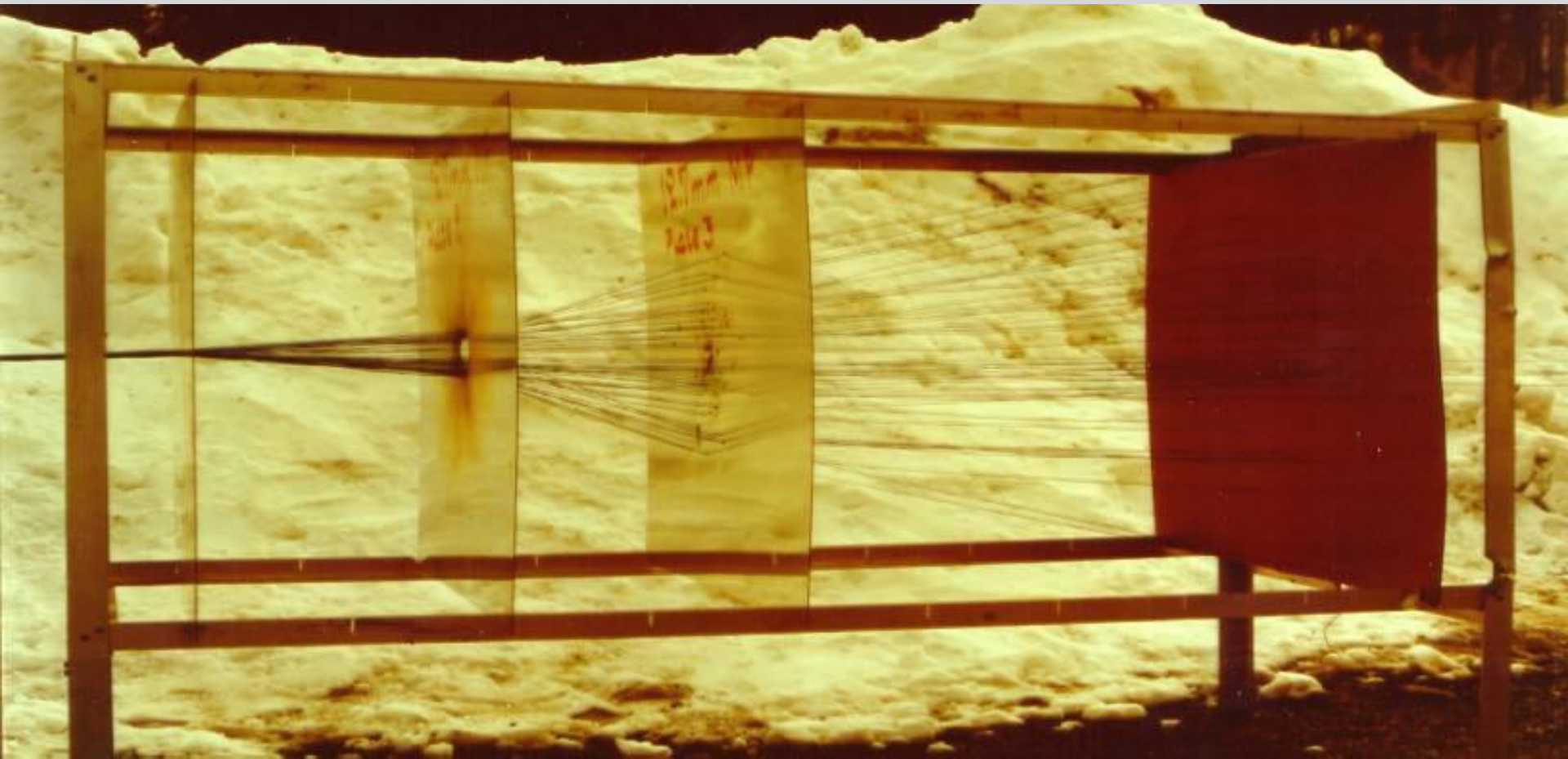


# or TOP military rounds: NAMMO Raufoss MP (MK211- NM140)

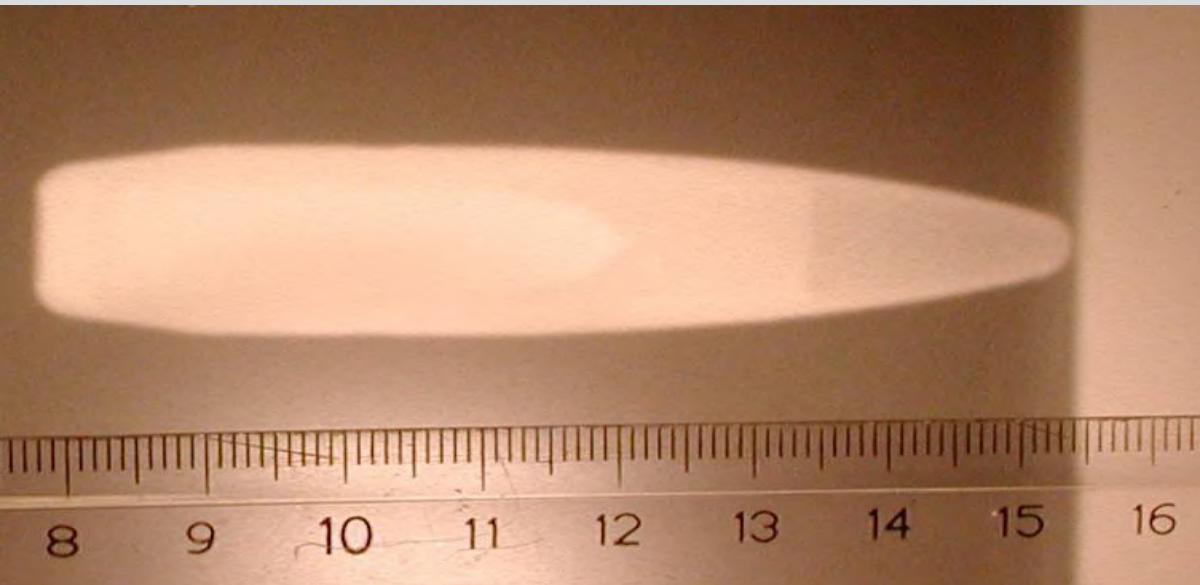
- 12,7mm Multipurpose introduced in 1981 (Norway NAVY)
- Penetration, fragmentation, incendiary and blast effect.
- Optimised for anti helicopter and anti-ship role.
- Secondary role against light armour and area suppression.



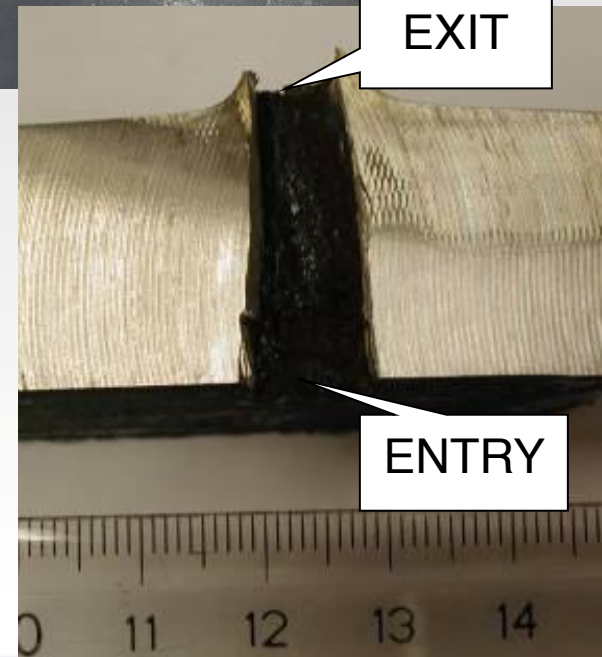
# Effects in Light Airspaced Target (wires through fragment penetration holes)



# Effects on Steel & Armored Boats



- Pirates behind barriers
- Armored targets
- Thick hull penetration





# Thank you

# Any Questions?

If you have any questions about sniper training, sniper technology or any sniping related issue:

[cybersniper@pobox.com](mailto:cybersniper@pobox.com)



[www.spectre.se](http://www.spectre.se)



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