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# Aimpoint BR8

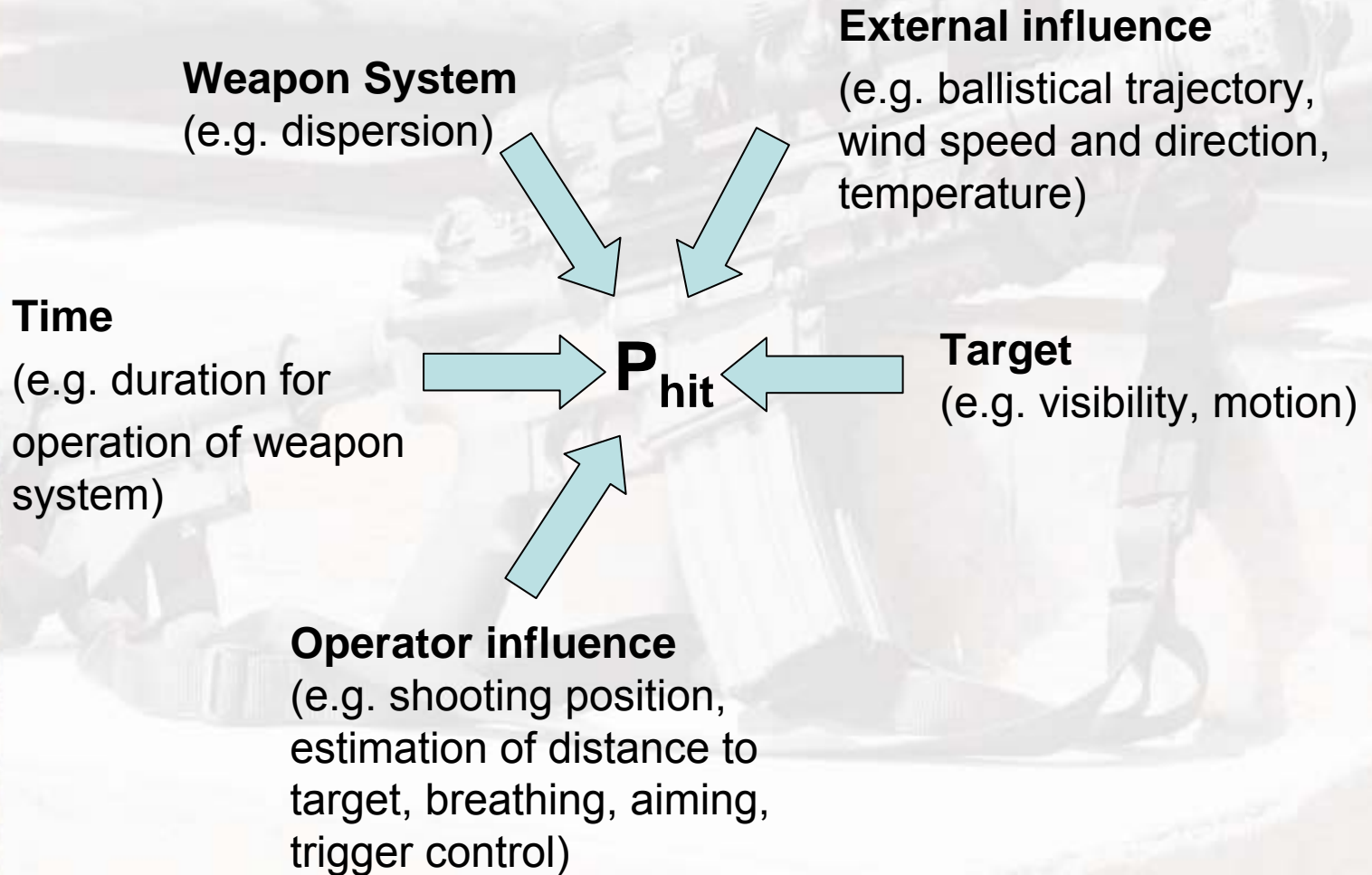
## A Fire Control System for Small Arms

**Aimpoint.**

**THE FUTURE IN SIGHT**

# Reasons for missing the target

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# Most important influence

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- Operator
- Distance to target together with ballistic trajectory

# Mechanical solution — MPS3

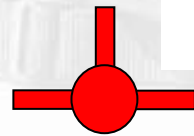
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- 4 MOA red dot
- 8 NVD settings and 8 daylight settings
- 70,000 hours of operation (on setting 12 of 16) on a single battery
- AA 1.5 V alkaline battery (sight accepts voltage up to 5.0 V)
- Prepared for external picatinny rail
- MIL-STD 1913 MGMount includes 3-step ballistic compensator (200, 800 and 1200m)



# MPS3 and MGM

- MIL-STD 1913 MGMount includes 3-step ballistic compensator (200,800 and 1200m – option customized)



1200m

# In operative use with US Forces

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**Aimpoint.**

**THE FUTURE IN SIGHT**

# Swedish FCS development

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- Trials with AGL's with different FCS's, and a market study have shown that currently there is no simple, lightweight, robust and affordable FCS available.
- Sweden has therefore decided to develop a FCS with industry for use with underslung grenade launchers, AGL's and 84mm Carl Gustaf recoilless rifles.
- A PDF study was done in 2002.
- A development contract was placed with Aimpoint in 2005.
- Delivery of prototypes in 2007.

# Aimpoint BR8 - Background

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- Fully integrated Sight and Fire Control System
- Suitable for a variety of weapons where ballistical correction to improve range performance and  $P_{Hit}/P_{Kill}$  is essential
- Prepare system for additional functionalities as technology matures



# Potential

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- A very large number of grenade launchers with very poor sight systems are in operative use (M203, AG36, XM320....)



- A large number of Automatic Grenade Launchers are in operative use (Mk 19, Mk47, GMG.....)
- A large number of Heavy Machine Guns are in operative use (M2, M3.....)
- A substantial number of Infantry Support Weapons are in use (Carl Gustaf.....)



# Crew served, in service

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Mk47 with LVS

- + Can do everything anytime
- Expensive, poor battery life
- Requires a lot of training
- Heavy

# Crew served, in service

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Mk47 with IS 2000

- + Easy to use
- +/- Small for CS, Big for HH
- Moving parts

# Hand held, almost in service

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OICW with optronic sight

- + Can do everything, anytime
- + 24h system
- Expensive, poor battery life
- Small FOV = short range

# Hand held, almost in service

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LEDs indicates correct elevation



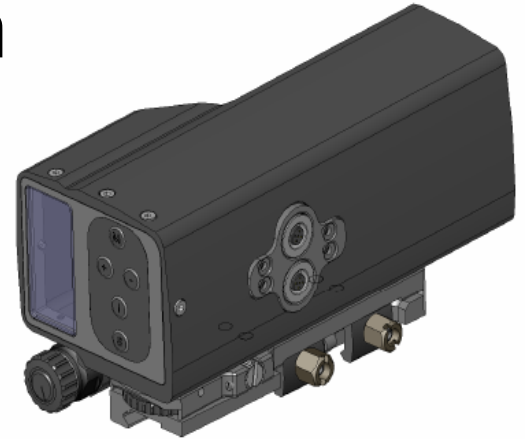
Soldato futura, separate FCS

- + Low cost
- Eyes on sight, not on target
- No real night capability
- No possibility to correct fire

# Aimpoint BR8 – System

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- 1x optical magnification
- 2MOA dot size
- Unlimited eye relief
- 1,2 kg
- 600 m measurement distance
- MIL-STD 1913 (Picatinny rail) interface
- Rechargeable internal battery
- AA size back-up battery



# Aimpoint BR8 – NATO Demo

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**THE FUTURE IN SIGHT**

# Aimpoint BR8 – NATO Demo

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**THE FUTURE IN SIGHT**



# Aimpoint BR8 – NATO Demo



# Aimpoint BR8 – NATO

## Demo

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# How it works

$V_0 * ToF...$



1. Aim and measure range



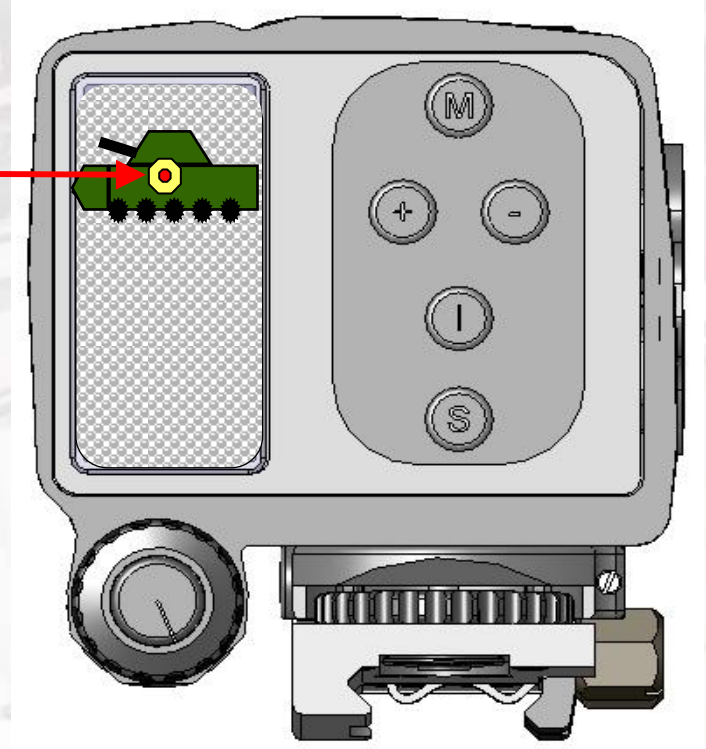
2. Realign and shoot

# Man-Machine Interface

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## Red dot

- Red dot Sight zeroed for the assault weapon
- Zeroed to the lobe of the LRF

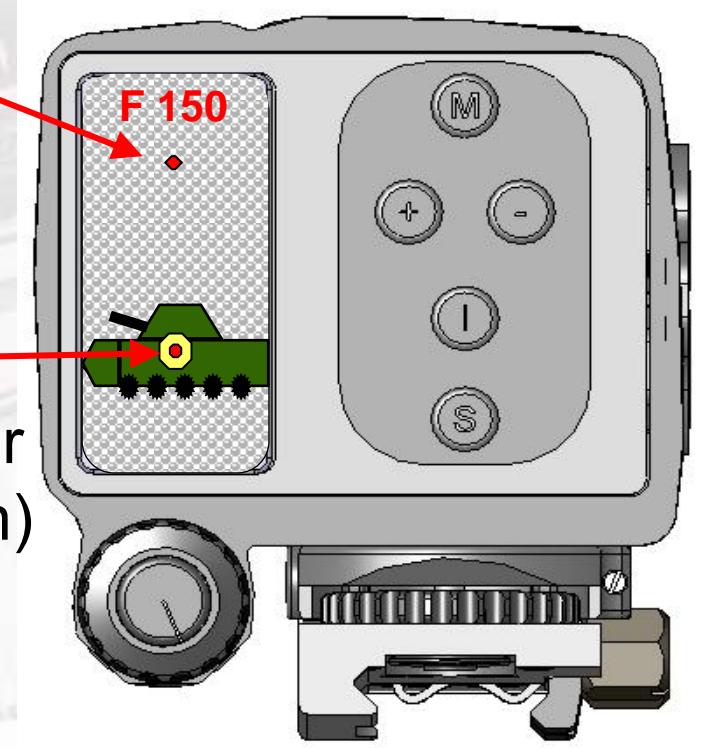


# Man-Machine Interface

Possibility to make a  
new LRF measurement

Possibility to use  
assault weapon

**Blinking Red Dot**  
presented as aimpoint for  
40mm UGL (superelevation)



# Find your target



# Aim at target – Measure Range

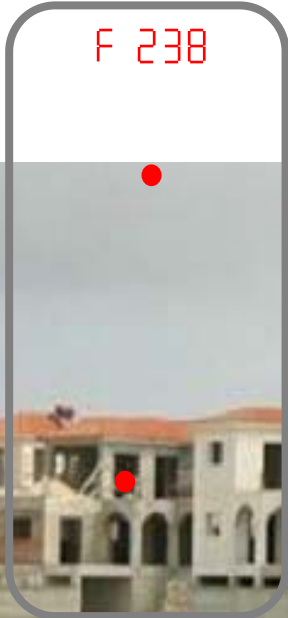


# Blinking Red Dot - Superelevate





# FIRE!



# Aimpoint BR8 – Project status

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- Prototypes have been delivered to FMV (Swedish Defence Materiel Administration)
- Demonstrated for NATO in Toledo  
2007-02-15: > 65%  $P_{Hit}$  at 1.2x1.2m targets from 100 to 250m!
- Additional prototypes available in late 2008

# WHAT DOES THE USER GET?

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- Superior situational awareness



# WHAT DOES THE USER GET?

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- Superior situational awareness
- Fastest target acquisition
- User friendly and reliable
- Dawn and dusk capability
- Compatible with all generations of NVG
- Long battery life
- Dramatic increase in  $P_{Hit}$
- Increased lethality to the enemy and increased survivability to own troops
- Reduced training time and costs

