Nammo: A Solution Provider – Enabling the Right Response –

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May 20, 2010
Local Presence – Global Understanding
Core Business in Support of The Warfighter
Core Technology

- **Precision**
  - Ammunition for Training and Warfighting
- **Lethality**
  - Our products shall be precise and minimize collateral damage
- **Reliability**
  - Shall always work – Thus Day & Night Solutions
- **Safety**
  - Safe environment for the producer and the user
  - Striving for Insensitive Munition solutions
Small Caliber Solutions – Examples:

From 5.56 → 12.7mm

- Armor Piercing
- Reduced Range (RR) for Tactical Use
- Dim Trace: Standard Trace and IR 100m at target above water
- Green Ammo
- Lapua .338 High Precision
Getting On Target – Sniper Grade

- Enhancing Performance of the AMR for MP, AP-S and SG
- By improving all Components
- Our Goal:
  Better Dispersion than Grade A
The 12.7mm Family – Mk 211 MP and others
Medium & Large Caliber Solutions

- MK 211
- Apex
- 30mm for Infantry vehicles
  - 40mmx53HE MK285 Programmable Airburst
- RA79
- Artillery and Mortars:
  - From 120mm IMHE to 155mm artillery
Shoulder Fired Solutions

- M72 ASM
- M72 EC
- M72 FFE
- BDM
- SMAW II
Missile Products Solutions

- State of the Art Solid Fuel Rocket Motors
- Tail End Control Technologies to take the Missile outside the Aerodynamic Flight Envelope by using:
  - Thrust Vector Control
  - Jet Flap Technology
  - Nozzle Technology
- Example: Exocet Block II Booster
Important Present and Future Programs

- FCT
- APEX
- AMRAAM
- SL IRIS-T
Foreign Comparative Testing

What Makes Foreign Companies Successful in FCT?

- Advocating presence in the United States
- Good relationship with the US Embassy Office of Defense Cooperation
- Strong capabilities that fulfill the needs of the US Warfighters
- If successful a great marketing tool
Important Present and Future Programs

- FCT
- APEX
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APEX – Future Fighter Aircraft Ammunition

- Producer of ammunition in use on Norwegian F-16 Fighters and several other NATO-fighters
- New Fighter Aircraft
  - New Ammunition
- Unique capability
  - New Air-to-Air and Air-to-Ground Capacity
- The Norwegian MoD is funding the development and qualification of the APEX Aircraft Ammunition
**APEX – The Multi Role Dual Purpose Round**

**Air-to-Air lethality capability**
- Fragmentation
- Blast
- Incendiary effect

**Air-to-ground lethality capability**
- Penetration of armor
- Fragments from the penetrator
Important Present and Future Programs

- FCT
- APEX
- AMRAAM
- SL IRIS-T
Second Source on the AMRAAM Program

- Selected by Raytheon to qualify an alternative rocket motor for the AIM-120 Advanced Medium Range Air-to-Air Missile
- Shared financing by USAF, the Norwegian MoD, Innovation Norway, Raytheon and NAMMO
- In use by 36 countries
Important Present and Future Programs

- FCT
- APEX
- AMRAAM
- SL IRIS-T
IRIS-T SL

- Optimizing an Air-to-Air Missile for Surface Launched Missions
- Reduced Smoke
- Introducing Composite Motor Case
- Further improved Tail End Control – in this case TVC
Nammo’s # 1 Priority

• The Warfighter

• Because all our Warfighters deserve the

World’s Best Capabilities
Securing the Future
– "FREEDOM TRAILS" –

MISSION PERFORMANCE SYMPOSIUM

XIIth MP Symposium, 14-15 June 2011, Raufoss, Norway
Join us at Nammo’s Booth # 411 in the Exhibition Hall
Thank you so much for your attention!

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