MK46 MOD0 (LMG)

2001 JOINT SERVICES SMALL ARMS SYMPOSIUM

Mr. Troy Smith
# Report Documentation Page

<table>
<thead>
<tr>
<th>Report Date</th>
<th>Report Type</th>
<th>Dates Covered (from... to)</th>
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<td>13Aug2001</td>
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<table>
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<tr>
<th>Title and Subtitle</th>
<th>Contract Number</th>
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<td>MK-46 MOD0 (LMG)</td>
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<tr>
<th>Author(s)</th>
<th>Project Number</th>
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<td>Smith, Troy</td>
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<tr>
<th>Performing Organization Name(s) and Address(es)</th>
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<tr>
<td>NAVSEA Crane</td>
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<tr>
<th>Sponsoring/Monitoring Agency Name(s) and Address(es)</th>
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<tbody>
<tr>
<td>NDIA (National Defense Industrial Association) 211 Wilson Blvd, STE. 400 Arlington, VA 22201-3061</td>
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**Sponsor/Monitor’s Report Number(s)**

**Distribution/Availability Statement**
Approved for public release, distribution unlimited

**Supplementary Notes**

**Abstract**

**Subject Terms**

**Report Classification**
unclassified

**Classification of this page**
unclassified

**Classification of Abstract**
unclassified

**Limitation of Abstract**
UU

**Number of Pages**
15
What is a MK46 MOD0 LMG?

A Lightweight Variant of the M249 SAW

- Weighs 27% less than the M249
- 80% M249 Parts Commonality
- Interoperable with the USSOCOM SOPMOD Kit
- 100K Receiver Life
- 9,700 MRBS
Program Tenants

- Obtain the “Best Value” Lightweight Machine Gun for USSOCOM in an Acceptable Timeframe
- Gain Up-Front Industry Involvement
- Maximize User Input in Source Selection Process
- Balance User Preference with Program Execution and Weapon Technical Considerations
MK46 MOD0 Program
“A USSOCOM Small Arms Success Story”

Roadmap to Success
• Streamlined Acquisition
• Maximized IPT Process (Government, Users, Industry)
• “Fly before You Buy” Test Strategy
• Weapon Performance

Follow-On Acquisition
• 7.62 LWMG Program
Streamlined Acquisition

FY00 New Start
Sponsored by USSOCOM (PEO-SP)
ORD required 425 LMGs
Received FY00 FCT Funds

Issued Solicitation on 12 October 99
Product Sample LMGs received on 15 Nov 99
Contract (N00164-00-D-0023) awarded to FNMI on 8 June 00

FUE reached on 30 March 01
FOC reached on 10 August 01
Streamlined Acquisition

Less than 1 year from MS 0/II to MS III

Integrated Efforts with FCT Program
Offset Program Cost and Maximized Use of FCT Funds with Highly Successful Result

Program Nominated by USSOCOM for David Packard “Excellence in Acquisition” Award
Acquisition Strategy

- Market Research
- Competition
- COTS with “Draft” Performance Specifications
- Best Value
- Product Samples
- Integrated Source Selection
- IDIQ Contract
- Use of First Article Units
Maximized IPT Process

Issued Draft Performance Specification to gain Early Industry Involvement and Reduce Risk

Provided Excess 5.56mm Ammunition at No Cost to Interested Vendors to conduct Technical Testing prior to Solicitation Issue

Established “Go/No Go” Criteria to allow Early Elimination of Non-Compliant Product Samples
Maximized IPT Process

Source Selection combined Technical Test and Operational Assessment of Product Samples

Served as “Fly-Off” between Competing Contractors
Operational Assessment Most Heavily Weighted Factor in SSP

Negotiated Weapon Improvements following OA but prior to Final Source Selection Decision
Maximized IPT Process

Implemented Single Organizational Level Maintenance Strategy

Integrated Maintenance Training with the NSW Enhanced O-Level Curriculum
### "Fly before You Buy" Test Strategy

#### Weapon Performance

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<tr>
<th>Objective/Threshold</th>
<th>Actual</th>
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<tbody>
<tr>
<td>Weight (lbs)</td>
<td>9/13</td>
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<tr>
<td>Corrosion Resistance (hours)</td>
<td>&gt;96/96</td>
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<tr>
<td>Interoperability w/SOPMOD(rails)</td>
<td>4/3</td>
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<tr>
<td>Length (in)</td>
<td>40/44</td>
</tr>
<tr>
<td>Firing Rate (rpm)</td>
<td>750/500</td>
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<tr>
<td>Service Life (rounds)</td>
<td>100K/50K</td>
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<tr>
<td>Barrel Life</td>
<td>15K/10K</td>
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<td>Reliability (MRBS)</td>
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The MK46 MOD0 met or exceeded all ORD requirements

ORD has been satisfied with Procurement and Fielding of 425 Weapons

Future requirements were considered

Indefinite Delivery Indefinite Quantity Contract (IDIQ)
Firm-Fixed Price/5 Year Option Availability (June FY05)
  IDIQ Min = 6 LMGs (First Article Units)
  IDIQ Max = 2,500 LMGs

Contract provides for Full Logistics Support Data as well as Spare Parts
MK46 MOD0 Program
“A USSOCOM Small Arms Success Story”
“The Bottom Line”

USSOCOM met the Warfighter’s need with a Superior Weapon at Significant Cost and Schedule Savings
Follow-On Acquisition
7.62mm LWMG

The current 7.62mm Machine Gun within the NSW Inventory (M60/MK43) has proven to be less than reliable, NSW users have lost confidence in the weapon and the weapon is becoming unsupportable.

Therefore, a MNS/ORD was approved on 21 March 2001 for a new Lightweight 7.62mm Machine Gun (LWMG).

The 7.62mm LWMG program has been patterned after the MK46 Program.

ORD requires 492 weapons.
Follow-On Acquisition
7.62mm LWMG

Issued “Draft” Performance Specification May 01
Issue Procurement Solicitation Oct 01
Receive 3 each Product Samples/Tech Proposals March 02
Conduct Initial Technical Testing March 02
Obtain Safety Release May 02
Perform Operational Assessment June 02
Award Contract for IDIQ Minimum Qty September 02

Interested?: Contact: Mr. John Pfender, (812) 854-5198,
E-Mail: pfender_j@crane.navy.mil