MK93 SMOKE DETERRENCE SYSTEM

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Harnessing the Power of Technology for the Warfighter
MK93 Smoke Deterrence System

• **Need for Smoke Deterrence System?**
  - US Special Operations Command, Riverine
  - US Marine Corps, Riverine
  - Less than lethal response
MK93 Smoke Deterrence System

- **Need for Weapons Mounted System?**
  - Hard mounted fixtures move with the craft
  - Hard mounted fixtures can’t be turned
  - Weapons mounted can provide both deterrent and lethal coverage
MK93 Smoke Deterrence System

• What is the purpose of this system?
  • Provide Smoke Deterrence for Numerous Applications
    – Hot Extractions
    – Provide cover from hostile aggressors
    – Provide precise placement of smoke placement
    – Provide rapid response
    – Provide lethal response from a covered position
MK93 Smoke Deterrence System

• What is the MK93 Smoke System?
  • Standard MK93 Universal Gun Mount
  • M6 66mm Smoke Grenade Discharger
  • M82 or M76 Smoke Grenades
  • Discharger Interface Bracket
  • Discharger Harness and Switches
MK93 Smoke Deterrence System

• **MK93 Universal Weapon Mount**
  - Interfaces with multiple weapons:
    - M2HB .50 Caliber Machine Gun
    - MK19 40mm Grenade Machine Gun
    - M240 7.62mm Machine Gun
    - M249 5.56mm Machine Gun
  - Commonly found throughout the Armed Forces
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• **M6 Smoke Grenade Discharger**
  • Deploys all Q-STAG 401 Grenades
    – M82 Practice Grenades
    – M79 Non-IR Penetrating
  • Weighs 8.5 Pounds
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- **Smoke Grenades**
  - M82 Practice Grenades
  - M76 NON IR penetrating
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• **Discharger Interface Bracket**
  • Designed to interface M6 Discharger to MK93 Weapon Mount.
    – No modifications required to MK93.
    – Bracket moves in train and elevation, allowing the gunner to aim where the grenades deploy.
    – Safety tested to double recoil for 2000 shots.
    – Live fire tested and design concurred by user evaluation
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• **Discharger Interface Bracket**
  – Engineering testing
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PROTOTYPE TEST
MK93 Smoke Deterrence System

• Harness and Switches
  • Firing switches designed to interface with all of the MK93 weapons.
    – Switches bolt on to the weapons.
    – Harness and Switches are EMI safety certified.
    – 24Vdc power
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SMOKE IN ACTION
MK93 Smoke Deterrence System

• Ancillary Equipment
  • AN/PAS 13 for FLIR viewing and Smoke Penetration
• **Ancillary Equipment**
  • AN/PVS21 with MHUD
    – Augment the head up viewing thru PAS21
MK93 Smoke Deterrence System

• **Summary**
  • Interface Discharger to MK93 with no modifications
  • Interface with current FLIR sights and NVEO goggles
  • Full range of motion for deploying smoke deterrence
  • 35 pounds total weight per MK93 system
  • Estimated $2000 per kit.