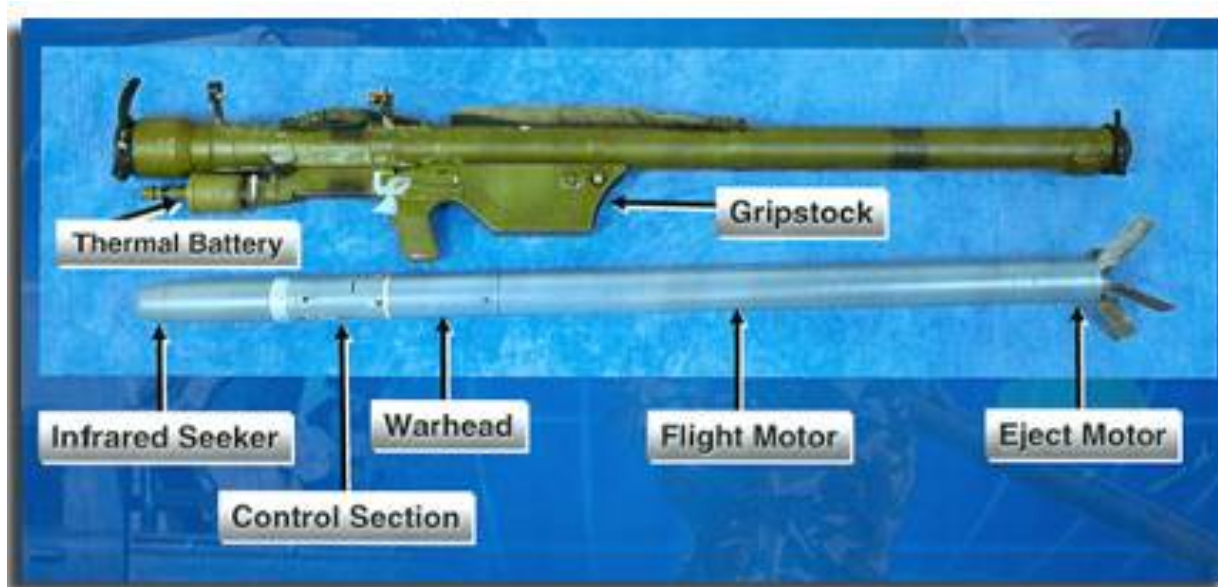


MANPADS PSSM and Threat Reduction



Profile of a Typical MANPADS



- “Shoulder-fired anti-aircraft missile”
- Short range – portable – relatively easy to use
- Typical maximum altitude approximately 15,000 feet (4,572 meters)
- Typical maximum range up to 3 miles (4.82 kilometers)

MANPADS Generations

- Militaries first developed MANPADS in the 1960s
- **Older-generation systems are the most-common in state-held stockpiles and present the largest threat to civilian aviation because...**



1968: SA-7 Strela-2 MANPADS



1981: SA-18 Igla MANPADS

Threat to Civilians

- Older systems are not effective against modern military aircraft countermeasures
- But they can be very effective against slow-moving passenger and cargo aircraft
- MANPADS can proliferate from conflict zones (e.g. Libya, Syria) along foreign fighter transit routes



Illicit MANPADS Transit

- Terrorist can utilize MANPADS from poorly-secured stockpiles
- South East Europe is a transit route for foreign fighters and weapons into/out of Syria
- Opportunity for arms proliferation from excess or poorly-secured stocks
- Opportunity to attack civilian aircraft

Loose MANPADS

Economic costs

- Successful attacks can ground aircraft for days
- Attempted attacks can have a similar impact
 - Imagine no air traffic for several days



Human costs

- Successful attacks on civilian airliners can kill hundreds
- Political problems/



MANPADS Incidents

- April 6, 1994
A Dassault Mystere-Falcon 50 executive jet carrying the presidents of Rwanda and Burundi was shot down over Kigali, killing all aboard and sparking massive ethnic violence and regional conflict.
- October 10, 1998
A Boeing 727 airliner was downed over the Democratic Republic of the Congo by Tutsi rebels, killing 40.
- December 26, 1998
A United Nations-chartered Lockheed C-130 Hercules transport was shot down over Angola by UNITA rebels, killing 14.
- November 28, 2002
Terrorists fired two MANPADS at an Arkia Airlines Boeing 757- 300 with 271 passengers and crew as it took off from Mombassa, Kenya. Both missiles missed.
- November 22, 2003
A DHL Airbus A-300 cargo jet transporting mail in Iraq was struck and damaged by a MANPADS. Though hit in the left fuel tank, the plane was able to return to Baghdad airport and land safely.
- March 23, 2007:
A Transaviaexport Ilyushin 76TD cargo plane was shot down over Mogadishu, Somalia, killing the entire crew of 11.



Persistent Challenge of Keeping Excess Weapons and Munitions

- Keeping excess stockpiles is costly:
 - No military value
 - Security/maintenance costs
 - Chance of explosion or proliferation
- **Retaining excess MANPADS, SA/LW and ammunition prevents modernization**



Defense Modernization

- Modernization includes purchasing new equipment, but also reduction of excesses
- Removing excesses allows you to focus budgets and priorities on acquisition, training, and deploying



U.S. Assistance: Technical Expertise

- U.S. places a high priority on reducing the global MANPADS threat
- Can provide technical expertise to
 - 1) reduce excess stockpiles
 - 2) recommend PSSM improvements

U.S. Assistance: Funding

- Can provide funding to support stockpile reduction and physical security improvement projects
 - Past engagements include several countries in South East Europe