

INFORMATION PAPER

ON

AN/AAQ-24 LARGE AIRCRAFT INFRARED COUNTERMEASURES (LAIRCM) SELF-PROTECTIVE SUITE FOR C-5 AIRCRAFT

1. Background. ANG C-5s operate worldwide in support of deployed US forces and various contingencies, which range from low to medium threat levels. One of the primary threats is a wide proliferation of shoulder fired infrared missiles (IR). Currently fielded defensive systems do not effectively protect the aircraft from current and future IR threats. The C-5 AN/AAQ-24 LAIRCM system uses a laser based system and includes next generation missile warning system to defeat the missile and does not rely on pyrotechnic expendables.

2. Requirement. LAIRCM ORD 314-92, Aug 1998.

3. Impact If Not Funded. C-5s operate in environments of increasing threat complexity and lethality. The current ALE-47 defensive system leaves aircraft vulnerable to IR missile threats. Also, supporting current ALE-47 infrared countermeasures systems is becoming increasingly difficult and expensive.

4. Units Impacted.

105 AW Stewart, NY

164 AW Memphis, TN

167 AW Martinsburg, WV

5. Contractor. Northrop Grumman Corporation, Rolling Meadows, IL; Lockheed Martin, Marietta, GA

6. Cost.

Product Type	Units Required	Unit Cost	Program Cost
Group A Kits	21	\$2.10M	\$44.10M
Group B Kits	21	\$4.90M	\$102.90M*
NRE	-	\$5.00M	\$5.00M
			\$152.00M

* Includes required spares, support equipment, technical orders, and training

INFORMATION PAPER

ON

C-5A DEFENSIVE SYSTEMS (ADS)

1. Background. Currently the only authorized C-5s to operate in hostile areas are the C5-Bs with defensive systems installed. The ANG operates only C-5As, which do not have a viable defensive system installed, restricting operations in hostile environments and creating a heavy burden on C-5B airframes. The defensive system will consist of an AAR-47 (V2+) Missile Warning System (MWS) and the ALE-47 Countermeasure Dispensing System (CMD5) to detect and counter infrared man portable air defense systems (MANPADS).

2. Requirement. MAC Statement of Needs (SON) 07-81, for Defensive Systems on Airlift Aircraft and Airlift defensive Systems (ADS) Operational Requirements Document (ORD), 207-81-III, 1 Jul 94 approved 2 Aug 1995; Program Management Directive (PMD) 2349(6), 8 Aug 2005.

3. Impact If Not Funded. C-5As cannot fly into airfields requiring Defensive Systems thereby stressing the C-5Bs on active duty. C-5As without defensive systems create operational constraints from the lack of defensive protection measures, which adversely affect aircraft availability to support mission requirements. Loss or damage of aircraft and loss of life from MANPADS will impact Air Force missions.

4. Units Impacted.

105 AW Stewart, NY

164 AW Memphis, TN

167 AW Martinsburg, WV

5. Contractor. TBD

6. Cost.

Units Required	Unit Cost	Program Cost
21	\$1.25M	\$26.25M*

* Includes required spares, support equipment, and technical orders

INFORMATION PAPER

ON

AN/AAQ-24 LARGE AIRCRAFT INFRARED COUNTERMEASURES (LAIRCM) SELF-PROTECTIVE SUITE FOR C-17 AIRCRAFT

1. Background. ANG C-17s operate worldwide in support of deployed US forces, and various contingencies, all of which range from low to medium threat levels. One of the primary threats is a wide proliferation of shoulder fired infrared missiles. Currently fielded defensive systems do not effectively protect the aircraft from current and future IR threats. The AN/AAQ-24 LAIRCM system uses a laser based system and includes next generation missile warning system to defeat the missile, and does not rely on pyrotechnic expendables.

2. Requirement. LAIRCM ORD 314-92, Aug 1998.

3. Impact If Not Funded. C-17s operate in environments of increasing levels of threat complexity and lethality. The current ALE-47 defensive system leaves aircraft vulnerable to the IR missile threat. Also, supporting current ALE-47 infrared countermeasures systems is becoming increasingly difficult and expensive.

4. Units Impacted.

154 AW Hickam AFB, HI 172 AW Jackson, MS

5. Contractor. Northrop Grumman Corporation, Rolling Meadows, IL; Boeing Company, San Antonio, TX

6. Cost.

Product Type	Units Required	Unit Cost	Program Cost
Group A Kits	16	\$1.88M	\$30.08M
Group B Kits	16	\$6.60M*	\$105.60M*
			\$135.68M

* Includes required spares, support equipment, technical orders, and training

INFORMATION PAPER

ON

AN/AAQ-24 LARGE AIRCRAFT INFRARED (IR) COUNTERMEASURES (LAIRCM) SELF-PROTECTIVE SUITE FOR C-130 AIRCRAFT

1. Background. ANG C-130s operate worldwide in support of deployed US forces and various contingencies in low to medium threat levels. One of the primary threats is the wide proliferation of shoulder fired IR missiles. Currently fielded defensive systems do not effectively protect the aircraft from current and future IR threats. The AN/AAQ-24 LAIRCM system uses a laser based system to defeat the missile and does not rely on pyrotechnic expendables.

2. Requirement. LAIRCM ORD 314-92, Aug 98. AFSOC Mission Need Statement #001-91, Infrared Countermeasures Improvements.

3. Impact If Not Funded. C-130s operate in environments of increasing levels of threat complexity and lethality. The current ALE-47 defensive system leaves aircraft vulnerable to the IR missile threat. Supporting the current ALE-47 infrared countermeasures systems is becoming increasingly difficult and expensive.

4. Units Impacted.

118 AW Nashville, TN	123 AW Louisville, KY	124 WG Boise, ID
127 WG Selfridge ANGB, MI	133 AW Minn - St Paul, MN	166 AW Wilmington, DE
130 AW Charleston, WV	156 AW San Juan IAP, PR	182 AW Peoria, IL
136 AW Carswell JRB, TX	165 AW Savannah IAP, GA	145 AW Charlotte, NC
176 WG Kulis, AK	179 AW Mansfield, OH	153 AW Cheyenne, WY
137 AW Oklahoma City, OK	139 AW St Joseph, MO	

5. Contractor. Northrop Grumman Electronic Systems, Rolling Meadows, IL

6. Cost.

Product Type	Units Required	Unit Cost	Program Cost
Group A Kits	141**	\$650K	\$91.65M
Group B Kits	71**	\$3.00M	\$213.00M
NRE	-	\$5.00M	\$5.00M
			\$309.65*

* Includes required spares, support equipment, and technical orders

** Total units required will equip entire ANG C-130E/H fleet