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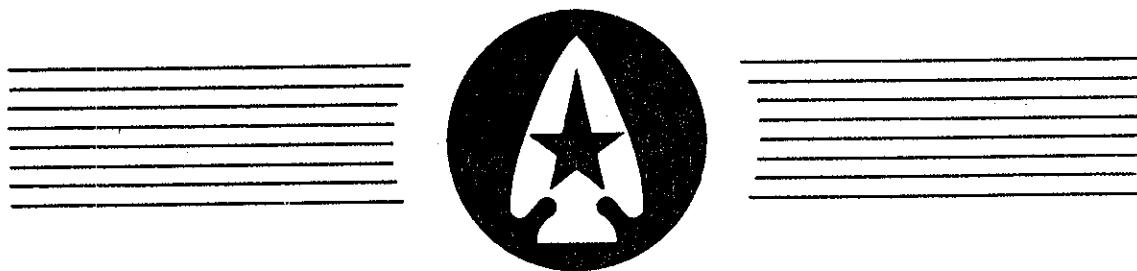
ATTACK HELICOPTER - DAYLIGHT DEFENSE

(USACDEC EXPERIMENT 43.6)

SPECIAL REPORT - VIETNAM

FIRST COMBAT AERIAL TOW TEAM

UNITED STATES ARMY COMBAT DEVELOPMENTS
EXPERIMENTATION COMMAND
Fort Ord, California 93941



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DEPARTMENT OF THE ARMY
HEADQUARTERS
US ARMY COMBAT DEVELOPMENTS EXPERIMENTATION COMMAND
Fort Ord, California 93941

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(U) USER REPORT FORMAT (U)

ATTACK HELICOPTER - DAYLIGHT DEFENSE

USACDEC EXPERIMENT 43.6

SPECIAL REPORT - VIETNAM

FIRST COMBAT AERIAL TOW TEAM

To assist the continuity of effort, users of this report of field experimentation are requested to identify the document/study to which this report provides input, and recommend changes in format, style or content as appropriate. An informal report in the format that follows is to be forwarded to CG, USACDEC, ATTN: CDEC-PL-M, Fort Ord, CA 93941.

GENERAL

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Report provides input to _____
(identify study, war game, or other)

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SPECIFIC

(This section is to be used to seek specific information related to the field experiment being reported.)

EXPERIMENT 43.6
SPECIAL REPORT - VIETNAM
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(U) PREFACE (U)

The introduction of the aerial TOW missile into the Vietnam conflict was a follow-on of USACDEC Experiment 43.6, Attack Helicopter - Daylight Defense. Equipment and personnel from this experiment were dispatched to RVN to further evaluate the airborne TOW. This report covers the operations and results of that evaluation.

A supplement to this report will be published as complete data becomes available. The proposed scope of this supplement is discussed in para. 1.5.

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ANNEX A

(C) MISSION ANALYSIS (U)

1. (U) GENERAL. This annex contains digested information about each mission, and where possible about each missile fired on each mission. In some cases, especially on the early training missions, all the information was not collected. After-action reports, aircrew debriefing forms, commanding officer's notes, and other sources of information were used in compiling these summaries. Whenever possible, the final copy was checked for accuracy by a member of the flight crew who flew the mission.
2. (U) SCOPE. The format of the summary is a Mission Summary Form, which lists general facts about the overall mission, such as weather and nature of the threat force. When possible, this is followed by an Event Summary Form, one for each missile fired. It contains specific information concerning the particular missile, and the target at which it was fired.

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A-1

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 30 April 1972

Time:

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: N.A.

Location:

Weather:

Mission: Testing of system

Threat Description: None

Summary of Engagement: One test missile was launched satisfactorily, but then went out of control due to system failure.

Difficulties:

Hostile Fire Received:

Other: 1) Missile system failed. Suspect hot climate had an adverse effect upon guidance.
2) Wire from missile went erratic and wrapped around swash plate of main rotor and tail rotor.

Action Taken:

- 1) Black boxes were moved to rear seat of AH and results were satisfactory thereafter.
- 2) New swash plate and master assembly required on AH.

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 1 May 1972

Time:

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: N.A.

Location: 10 miles south of Kontum

Weather:

Mission: Test firings.

Threat Description: None. Target was large rock.

Summary of Engagement: 5 missiles were fired by different crews. Three missiles missed due to excessive range of target (3300-3500 meters). Other two shots were in-range: they were perfect hits.

Difficulties:

Hostile Fire Received:

Other: 1) Commo problems with other aircraft.
2) Range estimation with target of undetermined size.

Recommendations:

- 1) Fix commo problem.
- 2) Consider installation of range finder.

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 2 May 1972

Time: 0830-1000

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: Fenwick/Lain/N.A.

Location: near Kontum

Weather: Cool, high thin clouds over east.

Mission: Destroy 3 partially disabled tanks near Kontum.

Threat Description: 3 M-41 tanks abandoned by the ARVN near Kontum on captured fire base.

Summary of Engagement: Three missiles were fired and each destroyed one of the tanks. Location was coordinates ZB171011MR2, ZB172013MR2, ZB171012MR2.

A-4

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 2 May 1972

Time: P.M.

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: Fenwick/Lain/Lehrshall

Location: Near Kontum

Weather: Cool, high thin clouds over east.

Mission: Destroy parked equipment at a captured ARVN firebase.
Continuation of previous mission.

Threat Description: 1 M-41 tank, 1 105mm howitzer, 1 truck,
all apparently abandoned.

Summary of Engagement: 4 missiles were fired from about 3000 AGL.
Above targets were all destroyed by 3 of the missiles. One missile
failed to give an IR signature and could not be tracked. It
exploded about 200m right of target.

Difficulties:

Hostile Fire Received:

Other:

Coordinates:

105mm howitzer: ZB177005MR2

2 1/2-ton truck: ZB176005MR2

Tank: AB173013

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 3 May 1972

Time: night

A/H#: 553

Crew: Pilot/Gunner/Crew Chief:

Location:

Weather:

Mission: Training.

Threat Description: None.

Summary of Engagement: No missiles were fired but much useful information about night use of system was gained.

- 1) Much more night training needed.
- 2) Target best illuminated by two flares dropped over it from at least 2000 ft. AGL. Best illumination achieved after flare has been allowed to settle about 500' above target. Flare oscillation causes visual problems.
- 3) Shape and size of target at night are determining factors in detection.
- 4) Night acquisition procedures. Pilot plays no role (he must monitor gauges at all times). Gunner scans with sight at 13X.
- 5) Possible difficulty with gunner being blinded by flares.

A-6

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 5 May 1972

Time: 1315-1340

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: Smith/Rowe/Lehrshall

Location: Open area

Weather: 5,000' scattered; visibility unrestricted

Mission: Training (low level firing)

Threat Description: 3-55 gallon drums.

Summary of Engagement: 2 missiles were fired at drums. Both were perfect hits (see event sheets).

Difficulties:

Hostile Fire Received:

Other: 1) Commo problem still uncorrected.
2) Wire cuts have to be manually performed by crew chief.
3) Shot from right side of ship did not line up as fast as shot from left.
4) Interference from weeds and bushes.

Recommendations: Fix commo problem.

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event# 1

Time: 1315 +

Tgt:

Description: 55 gallon drum

Activity: stationary

Detection cue: shape and color contrast. C and C located target.

Who acquired: gunner

Location:

Est. Altitude: 50' AGL

Air Speed:

Est. Slant Range: 2300 m

Maneuver: straight-in

Results: direct hit

A-7a

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 2

Time: 1315 +

Tgt:

Description: 55 gallon drum

Activity: stationary

Detection cue: shape and color contrast. C and C located target

Who acquired: gunner

Location:

Est. Altitude: 25' AGL

Air Speed:

Est. Slant Range: 2600 m

Maneuver: straight-in

Results: direct hit

A-7b

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 5 May 1972

Time: 1540-1830

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: Smith/Rowe/Lehrshall

Location: Poli Klang (23 km NNW of Kontum)

Weather: 5000'; scattered

Mission: Engage and destroy tanks in target area.

Threat Description: Tanks, appeared to be T-54's.

Summary of Engagement: UH-1B arrived in area and spotted two tanks. Gunner acquired one in sight but elected not to fire when another AH flew into his field of view. Targets were spotted several times thereafter, but thick jungle canopy made engagement impossible. TAC air was called in to attempt to uncover the tanks, but they were not sighted again. UH-1B returned to Pleiku.

Difficulties:

Hostile Fire Received: None

Other: 1) Other aircraft in area.
2) Targets acquired but out of maneuver limits for firing due to heavy foliage*.
3) Dust and smoke from jet fighters and B-52 obscured vision.
4) Aircraft vibrations extremely bad above 70 knots.

* Due to heavy foliage the targets were not detected until the AH was almost directly over them. Subsequent firing was not feasible since targets disappeared into jungle.

A-8

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Remarks: Targets were detected by shape, movement, color contrast, and metal glint.

A-8a

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 6 May 1972

Time: 2115-2230

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: Hixson/Whiteis/NA

Location:

Weather:

Mission: Night training.

Threat Description: None

Summary of Engagement: Due to organizational and equipment problems, no missiles were fired or useful training achieved.

Difficulties:

Hostile Fire Received:

Other: 32 out of 40 flares did not light

A-9

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 7 May 1972

Time: 1030-1145

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: Smith/Rowe/N.A.

Location: Fire base 41, just north of Kontum pass.

Weather:

Mission: Engage and destroy tanks in area

Threat Description: Tanks

Summary of Engagement: No tanks were detected in area

Difficulties:

Hostile Fire Received: C&C took AK-47 fire.

Other: Quoting from the gunner CW2 Rowe: "Again one of the problems was the heavy foliage in the area. You had to look directly down, and this causes the ground to pass by fairly quickly, causing extreme difficulty in referencing the area you are looking at. Also, if you do see anything you are too close to the sight limits to get a second look."

A-10

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 8 May 1972

Time: 1010-1145

A/H#: 554

Crew: Pilot/Gunner/Crew Chief: Hixson/Whiteis/Evans

Location: Rolling hills 20 km north of Pleiku

Weather: 15,000' scattered, visibility 7 miles

Mission: Destroy log bridge that was being used as a tank crossing by the NVA.

Threat Description: None

Summary of Engagement: Helicopter arrived in area and fired 4 missiles. First 2 missiles missed due to IR source not being acquired by guidance control. 3rd missile hit and destroyed bridge. 4th missile hit and destroyed abandoned truck in area. AH returned to base.

Difficulties:

Hostile Fire Received: None

Other: 1) Trees and foliage obstructed the targets at maximum range and 1200' AGL. Some difficulty encountered on initial acquisition of truck which was in a small clearing and difficult to locate with the unaided eye or low power optics at low angle slant range.

2) Interference from AH movement was also present.

Action Taken: Targets engaged from 1.5 km instead of 2-3 km.

A-11

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 1

Time: 1010 +

Tgt:

Description: Wooden bridge

Activity:

Detection cue: Shape and contrast; designated by C&C

Who acquired: Gunner and Pilot

Location: 20 km west of Pleiku in rolling hills

Est. Altitude: 1200'

Air Speed:

Est. Slant Range: 1500m

Maneuver: Straight-in

Results: Missile fired normally but IR source was not acquired by the guidance control. Target missed by less than 100m nonetheless.

Other:

A-11a

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 2

Time: 1010 +

Tgt:

Description: Wooden bridge

Activity:

Detection cue: Shape and contrast; designated by C&C

Who acquired: Gunner and pilot

Location: 20 km west of Pleiku

Est. Altitude: 1200' AGL

Air Speed:

Est. Slant Range: 1500m

Maneuver: straight-in

Results: Missile fired normally but IR source was not acquired by the guidance control. Target missed by less than 100m nonetheless.

Other:

A-11b

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 3

Time: 1010 +

Tgt:

Description: Wooden bridge

Activity:

Detection cue: Shape and color contrast; designated by C&C

Who acquired: Gunner and pilot

Location: 20 km west of Pleiku

Est. Altitude: 1200' AGL

Air Speed:

Est. Slant Range: 1500m

Maneuver: straight-in

Results: Hit - destroyed

Other:

A-11c

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 4

Time: 1100

Tgt:

Description: Abandoned truck

Activity:

Detection cue: Shape and color contrast; designated by C&C

Who acquired: Gunner and pilot

Location: 20 km west of Pleiku, coord YD811538MR2

Est. Altitude: 1200' AGL

Air Speed:

Est. Slant Range: 1500m

Maneuver: Straight-in

Results: Hit - destroyed

Other:

A-11d

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 1

Time: 1010 +

Tgt:

Description: Wooden bridge

Activity:

Detection cue: Shape and contrast designated by C&C

Who acquired: Gunner and Pilot

Location: 20K west of Pleiku in rolling hills

Est. Altitude: 1200' AGL

Air Speed:

Est. Slant Range: 1500m

Maneuver: Straight-in

Results: Missile fired normally but IR source was not acquired by the guidance control. Target missed by less than 100m nonetheless.

Other:

A-11e

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 9 May 1972

Time: 0700-1330

A/H#: 553

Crew: Pilot/Gunner/Crew Chief: Hixson/Whiteis/Lehrshall

Location: Plei Klang and Bien Het

Weather: Plei Klang: 2000 overcast, 5 miles
Bien Het: 1500 broken, 5 to 25 miles

Mission: Engage and destroy tanks used in support of an attack on
Bien Het ranger camp.

Threat Description: Infantry backed by tanks and AH weaponry.

Summary of Engagement:

0700 - Scramble from Holloway
0730 - Arrive at Plei Klang - depart during air strike
0800 - Hot refuel at Kontum - departed for Bien Het
0830 - Engaged and destroyed first tank
1000 - Refueled at Kontum
1100 - Departed Kontum to Bien Het

Difficulties:

Hostile Fire Received: Small arms and heavy machine gun

Other: 1) Commo problem due to obsolete radios
2) Heavy cloud cover made detection and firing difficult
for 1st target (see event data)
3) Sight-head vibrations caused difficulties and eyestrain.

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 1

Time: 0830

Tgt:

Description: Tank (PT-76)

Activity: Assaulting Bien Het ranger camp

Detection cue: Color contrast; designated by FAC and C&C

Who acquired: Gunner

Location: Bien Het, coord YB845345MR2

Est. Altitude: 2500' AGL

Air Speed:

Est. Slant Range: 2200m

Maneuver: Straight-in (shallow dive through clouds)

Results: Hit - destroyed with secondary explosion

Other: Due to weather (1500' broken, 8/10 overcast) the tank was detected and fired at through a hole in the clouds which required shallow dive for missile launch and capture.

A-12a

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 2

Time: 1135

Tgt:

Description: Tank (PT-76)

Activity: Engaged in major attack on Bien Het Ranger camp

Detection cue: Color contrast; designated by FAC and C&C

Who acquired: Gunner

Location: Between Bien Het and Kontum coord YB845345MR2

Est. Altitude: 3000' AGL

Air Speed:

Est. Slant Range: 3000m

Maneuver: Straight-in with right veer off on impact

Results: Direct hit with secondary explosion

Other: Weather: 300 overcast, AH acquired tank while below ceiling

A-12b

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 9 May 1972

Time: 0745-1400

A/H# : 554

Crew: Pilot/Gunner/Crew Chief: Smith/Rowe/Evans

Location: Bien Het, 15 NW of Kontum

Weather: 2000 broken, visibility 3 miles, by 1400 hrs. 3500 scattered, visibility 10 miles

Mission: To engage and destroy enemy tanks engaged in a major attack on Bien Het Ranger Base.

Threat Description: Infantry, armor, and AA weapons.

Summary of Engagement: 1st time out both escort Cobra's were hit; one shot down. UH-1B went in search pattern until forced to re-fuel. 2nd time out search without success while Air Force worked over surrounding area. 3rd time out, tank was acquired and destroyed. Returned to home base when fuel started running low.

Difficulties:

Hostile Fire Received: Small arms and heavy auto

Other: 1) Low ceiling in morning made target acquisition difficult.
2) No commo with ground forces due to limited FM radios.
 Made understanding of tactical situation difficult.
3) Weather was overall very bad: haze, rain, etc.
4) Organizational problems with support guns on 2nd run.

Recommendations: Better coordination with ground commander and guns and a more complete briefing.

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 1

Time: 1345

Tgt:

Description: PT-76 tank

Activity: Engaged in attack on Bien Het

Detection cue: Target shape color contrast; designated by FAC

Who acquired: Gunner and pilot

Location: Bien Het area coord YB845345MR2

Est. Altitude: 3000' AGL

Air Speed:

Est. Slant Range: 2500m

Maneuver: Straight-in

Results: Direct hit on turret, tank destroyed, with secondary explosion.

Other:

A-13a

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 10 May 1972

Time: 1210-1500

A/H#: 554

Crew: Pilot/Gunner/Crew Chief: Smith/Rowe/Evans

Location: WNW and NW of Kontum (coord. 111979)

Weather: hazy

Mission: To engage and destroy tanks in area.

Threat Description: Possible tanks

Summary of Engagement: Upon arriving at first site (coord 111979) a search for tanks was conducted and none were located. However, a POL dump was located and fired at by UH-1B (1 missile) and followed up with Cobra support. Refueling accomplished at Kontum followed by search for 130mm tube NNE of Kontum with no results. AH returned to home base.

Difficulties:

Hostile Fire Received:

Other: 1) Firing had to be accomplished at high angle which caused tracking difficulties (see event sheet)
2) Trees surrounding target produced interfering shadows
3) Vegetation around target was cause of necessary high attack angle.

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 1

Time: 1210 +

Tgt:

Description: POL dump

Activity:

Detection cue: Target shape, color contrast; designated by C&C

Who acquired: Gunner

Location: WNW of Kontum

Est. Altitude: 3000' AGL

Air Speed: 30 kts up to 80 kts at end of dive

Est. Slant Range: 1500m

Maneuver: Straight-in dive

Results: Hit. Secondary explosion resulted after Cobra worked over area.

Other: The high angle caused tracking problems. The nose was pushed over at 30 kn and A/S was 80 kn when recovery made. When AH was pulled out of dive at low altitude, gunner had difficulty keeping target sight; as a result missile became slightly erratic but target was still hit.

A-14a

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 12 May 1972

Time: 1335-2000

A/H#: 554

Crew: Pilot/Gunner/Crew Chief: Hixson/Whiteis/Evans

Location: 10 km north of Kontum

Weather: 3500 scattered, 10 miles visibility

Mission: Engage and destroy tanks north of Kontum.

Threat Description: At least one T-54 tank and possibly others that were camouflaged in area.

Summary of Engagement: AH worked over area for 6 hours and 20 minutes during which time it hot refueled 5 times. During this time, 3 missiles were fired at suspected camouflaged tanks, 3 at 1 known tank, and 1 last missile at a suspected camouflaged tank. AH forced to return to base because of darkness.

Difficulties:

Hostile Fire Received: Machine gun from tank.

Other:

- 1) Eyestrain from sight vibrations induced by AH vibrations.
- 2) Area was very heavily foliated, making detections almost impossible.
- 3) Heavy smoke in target area as a result of air strikes.

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 1

Time: 1335 +

Tgt:

Description: Suspected tank: unnaturally camouflaged area of bamboo

Activity: Stationary; no activity reported

Detection cue: Unnatural camouflage marked with smoke by C&C

Who acquired: Pilot and gunner

Location: 10 km north of Kontum

Est. Altitude: 2500' AGL

Air Speed:

Est. Slant Range: 3000m

Maneuver: Straight-in

Results: Target area was hit but no secondary was observed

Other:

A-15a

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 2

Time: 1335 +

Tgt:

Description: Unnatural appearing bamboo area suspected to be tank

Activity: Stationary; no activity

Detection cue: Unnatural appearance designated by smoke from C&C

Who acquired: Pilot and gunner

Location: 10 km north of Kontum

Est. Altitude: 2500' AGL

Air Speed:

Est. Slant Range: 2000m

Maneuver: Straight-in

Results: Target hit but no secondary observed

Other: Short range necessitated by heavy vegetation in area - required steeper dive angle

A-15b

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 3

Time: 1335 +

Tgt:

Description: Unnatural appearing bamboo area suspected to be tank

Activity: None

Detection cue: Shape and unnatural appearance designated by smoke from C&C

Who acquired: Pilot and gunner

Location: 10 km north of Kontum

Est. Altitude: 2500' AGL

Air Speed:

Est. Slant Range: 2000m

Maneuver: Straight-in

Results: Hit target but no secondary observed

Other: Short range and steep dive angle necessitated by heavy vegetation.

A-15c

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 4

Time: 1545

Tgt:

Description: T-54 tank

Activity: None recorded

Detection cue: Metal glint, shadow shape

Who acquired: Pilot and gunner

Location: 10 km north of Kontum under tall trees. coord 187064MR2

Est. Altitude: 2500' AGL

Air Speed:

Est. Slant Range: 2000m

Maneuver: Straight-in

Results: Missile impacted forward slope ground tank was on and damaged right front tread.

Other: Short range and high dive angle necessitated by heavy vegetation in area.

A-15d

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 5

Time: 1335 +

Tgt:

Description: T-54 tank (same one as for event 4)

Activity: None

Detection cue: Metal glint, shadow, shape

Who acquired: Pilot and gunner

Location: 10 km north of Kontum under tall trees coord ZB187064MR2

Est. Altitude: 2500' AGL

Air Speed:

Est. Slant Range: 1800m

Maneuver: Straight-in

Results: Hit tree directly in front of tank: cleared path for following missile

Other: Short range and steep dive angle necessitated by heavy vegetation in area

A-15e

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 6

Time: 1335 +

Tgt:

Description: T-54 tank (same one as missiles 4 & 5 were fired at)

Activity: None

Detection cue: Metal glint, shadow, shape

Who acquired: Pilot and gunner

Location: 10 km north of Kontum under tall trees coord ZN187064MR2

Est. Altitude: 2500' AGL

Air Speed:

Est. Slant Range: 1500m

Maneuver: Straight-in

Results: Direct hit behind turret followed by a large secondary.
Tank burned for 3+ hours.

Other: Short range and steep dive angle necessitated by heavy
vegetation in area.

A-15f

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 7

Time: 1335 +

Tgt:

Description: Unnatural bamboo clump suspected to be camouflaged tank

Activity: None

Detection cue: Unnatural appearance of vegetation

Who acquired: Pilot and gunner

Location: 10 km north of Kontum

Est. Altitude: 2200' AGL

Air Speed:

Est. Slant Range: 2000m

Maneuver: Straight-in

Results: Target hit but no secondary resulted.

Other: Short range and steep dive angle necessitated by heavy vegetation in the area.

A-15g

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 12 May 1972

Time: 0945-1220

A/H#: 554

Crew: Pilot/Gunner/Crew Chief: Smith/Rowe/Evans

Location: 15 km north of Kontum

Weather: 3000 broken, heavy ceiling with varying altitude

Mission: To engage and destroy 1 tank spotted in area

Threat Description: 1 tank

Summary of Engagement: No detection was made and no missiles were fired.

Difficulties:

Hostile Fire Received: None

Other: 1) Numerous other aircraft were operating at the same altitude in the area.
2) Target area was heavily foliated which made target acquisition very difficult.
3) Eyestrain from vibrations in sight-head.

Recommendations: Keep other aircraft clear of the TOW system.

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(C) MISSION SUMMARY FORM (U)

43.6 RVN

Date: 13 May 1972

Time: night

A/H#: 554

Crew: Pilot/Gunner/Crew Chief: Fenwick/Lain/Evans

Location: Kontum area

Weather:

Mission: Night operation

Threat Description:

Summary of Engagement: 2 missiles were fired in night; first was out of range and second hit target.

A-17

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 1

Time: Night

Tgt:

Description: Tracers impacting ground

Activity:

Detection cue:

Who acquired: Gunner

Location:

Est. Altitude: 2500'

Air Speed: 60 kn.

Est. Slant Range: 4500 +m

Maneuver: Straight-in

Results: Out of range

Other: Target was tracers from C&C ship impacting ground - no ground terrain features visible to estimate range.

A-17a

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(C) EVENT SUMMARY FORM (U)

43.6 RVN

Event # 2

Time: Night

Tgt:

Description: Tracers impacting ground

Activity:

Detection cue:

Who acquired:

Location:

Est. Altitude: 2500' AGL

Air Speed: 60 kts.

Est. Slant Range: 2500-2000m

Maneuver: Straight-in

Results: Hit

Other: Gunner was able to track impact point of tracers and missile hit point where tracers disappeared either into trees or at ground level.

A-17b

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