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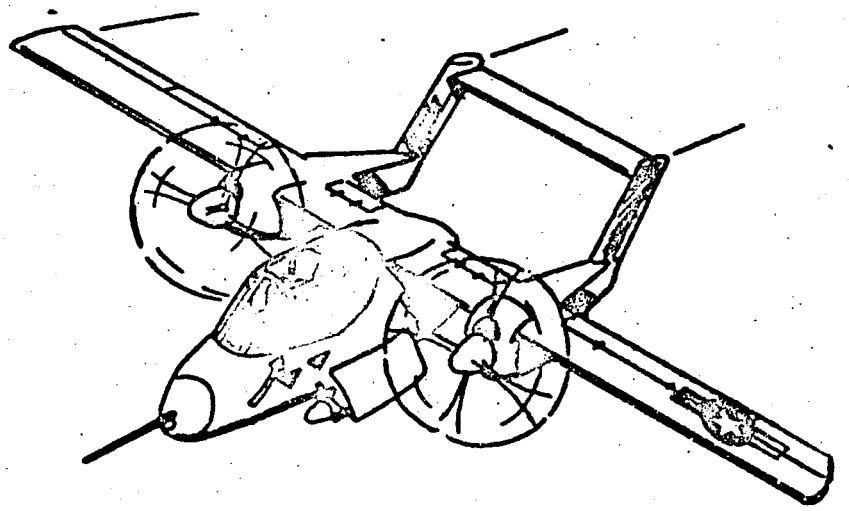
TACC
EXERCISE DIRECTIVE I

MISTY BRONCO



ARMED OV-10A EVALUATION
-JULY 1969-

HEADQUARTERS SEVENTH AIR FORCE
TACTICAL AIR CONTROL CENTER
APO SAN FRANCISCO 96307

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HQ 7AF TACC EXERCISE DIRECTIVE 1

MISTY BRCNCC

FINAL REPORT

JULY 1969

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Director, Tactical Air Control Center

FOREWORD

(C) The armed OV-10A evaluation was managed and conducted in accordance with Headquarters 7th Air Force Tactical Air Control Center Exercise Directive 1. (Short Title: Misty Bronco) (U)

(C) The evaluation was conducted with the OV-10A aircraft and Tactical Air Control Party supporting the 2nd Brigade, US 25th Infantry Division, Cu Chi AAF, RVN. The first sortie was flown on 4 April 1969 and the final sortie was flown on 13 June 1969. The Misty Bronco Evaluation was completed on 13 June 1969.

(U) The following personnel were responsible for the management and conduct of the test and for the preparation of this report.

7 AF Project Officers	MAXWELL R. SIDNER, Major, USAF
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ABSTRACT

(C) The Misty Bronco exercise was conducted as a fact finding project to provide information on support and operational requirements for the planned implementation of Phase III Evaluation of Combat Cover. The evaluation involved the use of the CV-10A FAC aircraft in providing a limited but highly responsive airstrike capability to support US Army Forces requesting immediate close air support and to use against FAC acquired targets until heavier fire support could respond, if needed.

(C) The evaluation was conducted using the CV-10A aircraft and TACP supporting the 2nd Brigade, US 25th Infantry Division, located at Cu Chi AAF, RVN. The test period ran from 4 April through 13 June 1969. The armed FAC concept proved very successful. The effectiveness of the Armed FAC in reducing response time for Air Force strike support to Army immediate close air support requests was demonstrated by the immediate responsiveness of the FAC. In addition, small groups of VC, enemy vehicles, sampans, etc., could be contained by the armed FAC until heavier fire support could be brought onto the target, or, as in many cases, the FAC's fire power was sufficient to destroy the target.

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Explanation of Terms and Abbreviations

AAA	Anti Aircraft Artillery
AGL	Above Ground level
Air Strikes	Employment of tactical airpower (including armed FAC) against enemy ground forces.
BDA	Bomb Damage Assessment
CAS	Close Air Support
DASC	Direct Air Support Center
FAC	Forward Air Controller
Fleeting Targets	Targets such as enemy personnel, sampans, vehicles, that require immediate air strike.
FM	Frequency Modulation
FOB	Forward Operating Base
GVN	Government Vietnam
HE	High Explosive
Immediate Air Strike	Air Force Strike Aircraft that are air diverted or scrambled from ground alert to target area.
KBA	Killed by Air
Misty Bronco	Nickname given to TAF armed OV-10A evaluation
MSB	Main Support Base
Non-Time Sensitive Target	A semi-permanent target not requiring immediate Air Strike.
OV-10A Response Time	For TIC situations, it is the period from the receipt of an Army CAS request for an immediate air strike until ordnance is fired at the target by the armed FAC. For targets other than CAS, response time is that period from which the armed FAC determines the target is enemy and requests strike clearance, or from the time the FAC's assistance is requested by other sources, until ordnance is fired on the target by the armed FAC.

RVN	Republic of Vietnam
SEA	South East Asia
Support Opportunity	An occasion where the armed FAC has been requested by the ground commander or other responsible agencies to expend, or when the FAC determines his ordnance is required to contain or destroy an enemy target, and other fire support is not immediately available.
TACC	Tactical Air Control Center
TACP	Tactical Air Control Party
TIC	Troops in Contact with Enemy Forces
TOC	Tactical Operations Center
UHF	Ultra-High Frequency
VHF	Very High Frequency
VC	Viet Cong
VR	Visual Reconnaissance
W/P	White Phosphorous

SECTION I

Introduction

In response to direction from the Commander, 7th Air Force, a requirement was established for the Tactical Air Control Center to conduct an operational evaluation of the armed FAC concept in SEA, employing the OV-10A aircraft. The armed OV-10A evaluation was to be a fact finding project to provide information on support and operational needs for the planned implementation of Combat Cover. The exercise was to be accomplished within available resources. The extent and duration of the evaluation was to be determined by existing supply, munitions and personnel assets.

Combat Cover was the name given to the Operational Test and Evaluation (OT&E) of an armed FAC/Gunship Phased Response Test. The objective of the test was to evolve an effective method of providing countinuous USAF strike presence over US Army maneuvering units and reducing USAF reactior time to Army requests for immediate close air support. Combat Cover was to be conducted in three phases of effort. Phase I was a comparative analysis of the different types of FAC and gunship aircraft to determine the armed FAC/Gunship aircraft optimum combination versus the cost of the combination. The OV-10A and AC-119G were selected for the test. Phase II was conducted in CONUS to develop tactics, profiles, and procedures for the evaluation of the armed FAC/Gunship phased response concept. Operational feasibility of the concept was determined during this phase and sufficient data was obtained to derive operational concepts and procedures. Phase III of Combat Cover was to be a SEA evaluation to provide a quantitative assessment of the phased response concept under combat conditions. A subsequent added objective of Phase III was to evaluate the phased response concept of the armed FAC/gunship in situations involving other than close air support.

Headquarters 7th Air Force issued TACC Exercise Directive 1, "Misty Bronco", on 1 April 1969. This Directive assigned responsibility to the 504th Tactical Air Support Group to provide required support to conduct a limited evaluation of the armed FAC concept. The OV-10A aircraft and Tactical Air Control Party supporting the 2nd Brigade, US 25th Infantry Division were utilized in the evaluation. The exercise was conducted under the operational control of 7th AF TACC through the Director, III DASC.

The objectives of the Misty Bronco Evaluation were to:

a. Evaluate the armed FAC concept and determine problem areas.

b. Identify personnel and materiel requirements.

c. Determine response timing and FAC effectiveness.

All objectives were accomplished during the conduct of the evaluation. Phase III, Combat Cover was to have begun on 15 June 1969, and be conducted with the combat operations of the US 25th Infantry Division, Cu Chi AAF, RVN. However Hq. USAF subsequently canceled Phase III based on the results of the 7th Air Force conducted Phased Response Test which incorporated the Misty Bronco Evaluation.

SECTION II

Description

A. Resources

The Tactical Air Control Party (TACP) supporting the 2nd Brigade, US 25th Infantry Division located at Cu Chi AAF, RVN was selected for the evaluation of the armed FAC concept. The AIO and FACs assigned to the 25th Infantry Division TACP, also located at Cu Chi, participated in the program. The exercise force consisted of six OV-10A aircraft, nine AIC/FACs, two munitions maintenance specialists (462X0), and the normal TACP complement of maintenance and support personnel. The two 462X0 personnel were assigned TDY to load and maintain the M-60C machine guns. The existing communications facilities of the 2nd Brigade TACP, 25th Division TACP, and III DASC were utilized and included air/ground/air facilities and dedicated voice circuits.

B. Description of Equipment

The OV-10A Bronco is a twin engine (two T76 turboprop engines) multipurpose aircraft with high mounted, straight wing; a large, glass-enclosed cockpit; twin tail booms; and swept verticle stablizers with a high set horizontal stabilizer. The cockpit section contains a second flight crew station. The OV-10A has been used in RVN primarily as an aerial FAC platform for day control of air strikes and reconnaissance in support of US forces. The night operation has been limited mainly to alert scrambles for troops in contact situations. The aircraft is armed with four, forward firing M-60 (7.62mm) machine guns with 500 rounds per gun and five armament stations capable of carrying 3,600 rounds of additional ordnance or fuel. The centerline station can carry a 150 or 230 gallon fuel tank for extended range. For the Misty Bronco evaluation, two standard munitions configurations were authorized.

(1) Day Configuration:

(a) 2,000 rds 7.62mm

(b) 2 LAU-59A (White Phosphorous) on stations 2 and 4.

(c) 2 LAU-59 (High Explosive) on station 1 and 5.

(d) Aircraft gross take off weight (2 pilots) - 11,070 lbs.

(e) FAC time on station 2.5 hours.

(2) Night Configuration:

(a) 2,000 rds 7.62mm

(b) 2 LAU-59A (White Phosphorous) on station 2 and 4.

(c) 1 LAU-59A (High Explosive) on station 5.

(d) 1 BAK-37 Flare Rack/with 4 MK-24 flares on station 1.

(e) FAC time on station 2.5 hours.

The High Explosive rockets were loaded on station 1 and 5 to facilitate visual checks for hung HE ordnance. A one-in-five tracer to ball ammunition ratio was used to aid the pilot in observing his fire.

C. Description of Missions

(1) Day Missions

The day missions involved the conventional FAC operations with sorties planned for Visual Reconnaissance (VR) and/or preplanned FAC missions to conduct airstrikes or to CAP a ground operation. The FAC maintained radio contact with the Brigade and Division TACP on VHF and UHF. An FM radio frequency was also available but was used mainly to provide communications with the ground forces.

If ground contact (TIC) occurred while the FAC was on a VR mission the ground commander notified the brigade TOC and TACP. The TACP contacted the FAC, providing coordinates and information concerning the ground situation. The FAC proceeded directly to the area of operation and established radio contact with the ground forces.

Upon arrival in the target area, the FAC visually identified the friendly positions and was briefed on the ground situation. The FAC remained overhead until released by the ground commander and if necessary was relieved on station by another FAC. Depending on the size of the enemy contact and intensity of fire received, the ground commander could request the FAC's ordnance and/or immediate close air support. The FAC contacted the Division TACP requesting immediate TAC Air and strike clearance. If required, the FAC would expend in the interim period until TAC Air arrived. In some instances the target did not warrant TAC Air and the FAC fire power was sufficient to satisfy the ground commander's request for close air support.

The same procedures were involved when the FAC's mission was to CAP a ground operation. If during a preplanned strike, an immediate request for close air support was received, the FAC obtained permission to divert the TAC Air, provided the ordnance being carried was appropriate for close support of ground forces.

(2) Night Missions

No armed night sorties were scheduled but an alert capability was maintained for emergency troops in contact situations. During the period of this evaluation an armed FAC was scrambled a total of seven times.

D. Data Collection

Data collection on each mission was recorded by the FAC and the USAF radio operator at the Brigade TACP. A FAC Data report was completed after each mission and a daily operations summary was forwarded to the DASC at the end of each days' operation.

SECTION III

Restrictions and Procedures

A. FAC Munitions Exrenditure Restrictions

The rrimary mission of each FAC rarticinating in the evaluation continued to be the basic forward air control (FAC) mission, e.g. strike control, visual reconnaissance (VR), artillery adjustment and escort. Arming the OV-10 aircraft rrovided the FAC with a limited but highly responsive airstrike capability to be used in surrort of friendly troops-in-contact until TAC Air could respond and against FAC acquired targets until heavier fire surrort could respond, if needed. If during the course of a mission, the FAC determined the use of his armament was required, the following guidelines applied.

(1) Exrenditure of munitions and the conduct of all operatior was in accordance with 7th AFR 55-49, Rules of Engagement (ROE) for In-Country Operations.

(2) Target strike clearance was obtained under the same established rrocedures for emrlovment of TAC Air.

(3) Targets must warrant and be arrorriate for air attack with the vearons available.

(4) The armed FAC could exrend in rerronse to the ground commander's request when TAC Air was not readily available.

(5) The armed FAC could exrend against small fleeting targets in order to contain the enemy until heavier fire support could respond, or in some cases destroy the target. Strike clearance must be obtained before any exrenditure.

B. Operational Limitations

(1) OV-10A armament delivery was restricted to a minimum recovery altitude of 1500 feet AGL.

(2) High explosive ordnance was not exrended without an orerational gunsight.

(3) Gun duels against AAA sites were rrohibited.

(4) LAU-59 A rocket launchers were rreset rrior to take off in "singles" setting.

(5) Oreratine restrictions for the OV-10 aircraft were as specified in current manuals, regulations and directives.

(6) Night orerations were restricted to emergency troops-in-contact situations only.

C. Certification of ALO/FAC's

All ALO/FAC's participating in the armed OV-10 evaluation were certified for both day and night, M-60 machine gun delivery techniques. All certifications were accomplished with a fully qualified instructor pilot in the back seat and were based upon demonstrated capability against well defined, tactical-type targets, where hits could be adequately evaluated. A total of 23 training missions were flown from 4 April to 11 April, to complete all certifications.

SECTION IV

Evaluation Results and Discussions

A. General

During the evaluation period 4 April through 13 June a total of 531 CV-10A sorties and 1,225 hours were flown for an average sortie length of 2.3 hours. Twenty-three of these sorties were flown for training during the initial certification of the AIC/FACs. Table 1 presents a summary of total missions flown, munitions expended and known ground fire received during the evaluation. Although it was anticipated that the vunlnerability of the armed FAC would increase over the conventional FAC, due to increased exposure in multiple firing passes, the evaluation did not produce any significant increase in incidents of aircraft battle damage or loss. This was attributed to the stringent rules of engagement under which the armed FACs conducted operations.

Table 1. Summary of Sorties Flown, Munitions Expended, and Ground Fire Occurrance

	Sorties Flown	Munitions Exp		Ground Fire	
		HE Rxs	7.62mm	Received	Acft Hits
Armed FAC	508	1,171	84,105	11	2
Training	23	521	37,375	0	0
TOTAL	531	1,692	121,480	11	2

Gunsight failures plagued the first two weeks of operations with 8 failures occurring. The 19th TASS had experienced approximately 50 failures in the CV-10A gunsight from 24 December 1968 through 13 April 1969. The cause was determined to be overheating of a transistor which was installed in a fiberglass panel with no free airflow allowed for cooling. TCTO 11-10A-503 required the affected transitor to be relocated outside the panel for proper cooling and this solved the failure problem. Some minor gun malfunctions occurred but did not present any serious problems.

On 13 April the runway at Cu Chi AAF was closed for repairs and the flying operations were moved temporarily to Bien Hoa AB which was located 20 miles East of Cu Chi. This added approximately ten minutes flying time from Bien Hoa to the 2nd Brigade AO but no degradation of the mission resulted. Operations were resumed at Cu Chi on 30 May 1969.

A total of 508 armed sorties were flown during the evaluation with an average of seven sorties per day. The armed FAC expended ordnance on approximately 1.4 sorties per day. (see Fig 1 for total sorties flown versus sorties expended).

Table 2. Distribution of Support Opportunities and FAC Expenditure by Target Type

Type Target	Support Opportunities	Expenditure	Additional Fire Support N/R
Troops in Contact (TIC)	32	25	7
Fleeting	50	48	33
Non-Time Sensitive	25	25	25

An armed FAC was airborne continually during the 12 hour daylight period, over the 2nd Brigade AO. A total of 107 support opportunities occurred where the armed FAC could have been utilized, (see Table 2). On 98 of these occasions, the FAC expended his ordnance. The FAC did not expend on nine support opportunities due to immediate availability of other fire support on seven occasions, an inoperative gunsight on one occasion, and failure to receive strike clearance in time to expend on one occasion. Thirty-two of the support opportunities were in immediate support of the Army for troops-in-contact (TIC) situations. The FAC expended on 25 of these 32 occasions and in seven instances he provided sufficient fire power to the ground commander so that TAC Air or ground organic fire support was not required. The FAC provided interim fire support on the 18 other occasions. The remaining 75 support opportunities were mainly FAC acquired targets and the FAC expended his ordnance on 73 targets, requiring no additional fire support on 58 occasions. The average FAC response time (see Fig 2) from the ground commanders initial request, until the FAC expended his ordnance on the target was 5.1 minutes. The majority of this time (3.7 min) was delay caused while obtaining ground clearance to fire. The average FAC response time against FAC acquired targets was 8.7 minutes for fleeting targets and 6.8 minutes for non-time sensitive targets. Again clearance time was the main delay factor, being 6.4 minutes and 6.2 minutes, respectively. The average FAC response time to all targets on which he expended was 7.3 minutes, with 5.7 minutes being required for clearance. However, approximately 65 percent of all armed FAC response times were 5 minutes or less, and the average time was 2.4 minutes. The responsiveness of the armed FAC ranged from instantaneous in many cases to as long as 45 minutes in one instance.

Armed Sorties Flown verus Sorties Expended

5 - 30 April

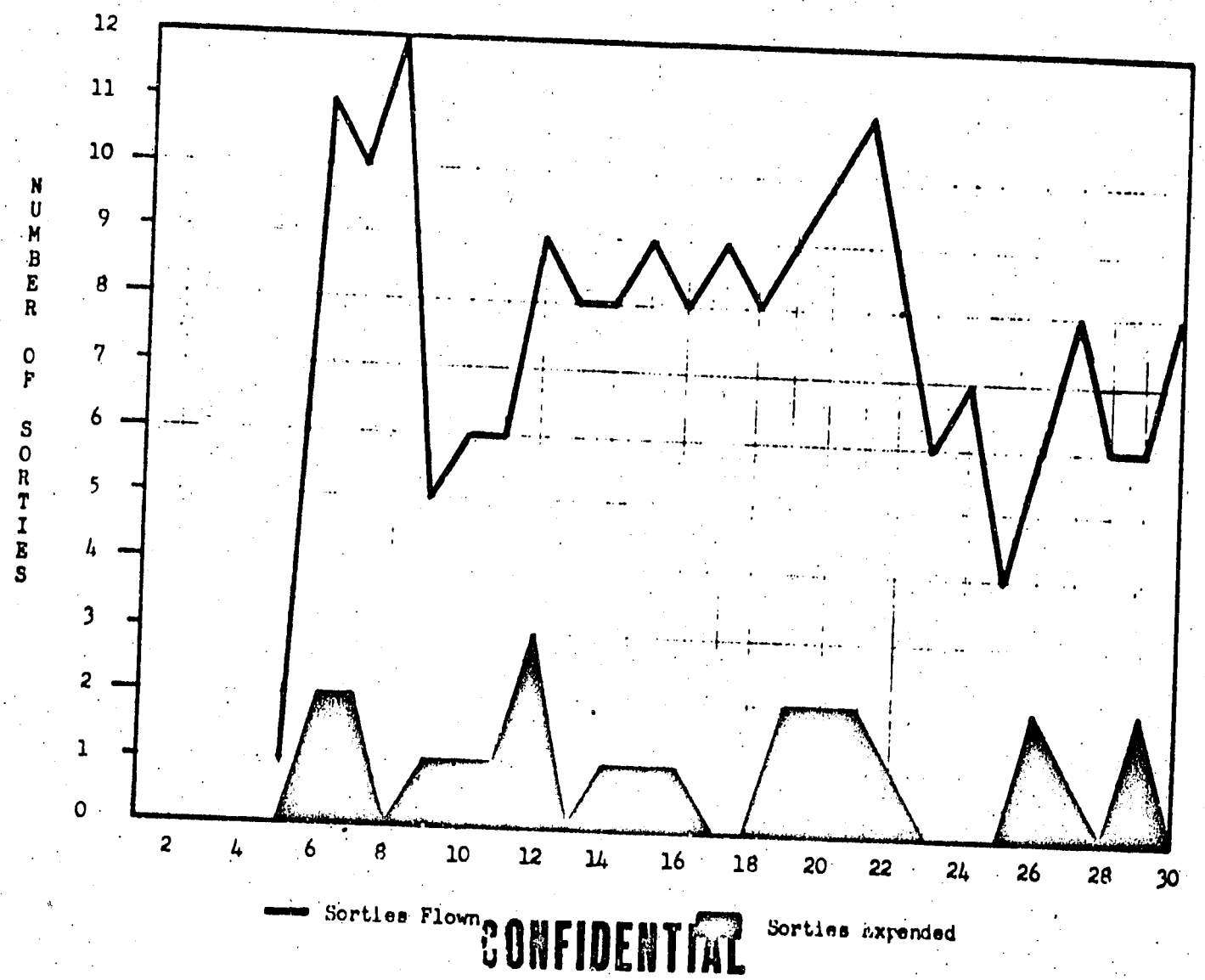

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Fig 1

Armed Sorties Flown verus Sorties Expended

1 - 31 May

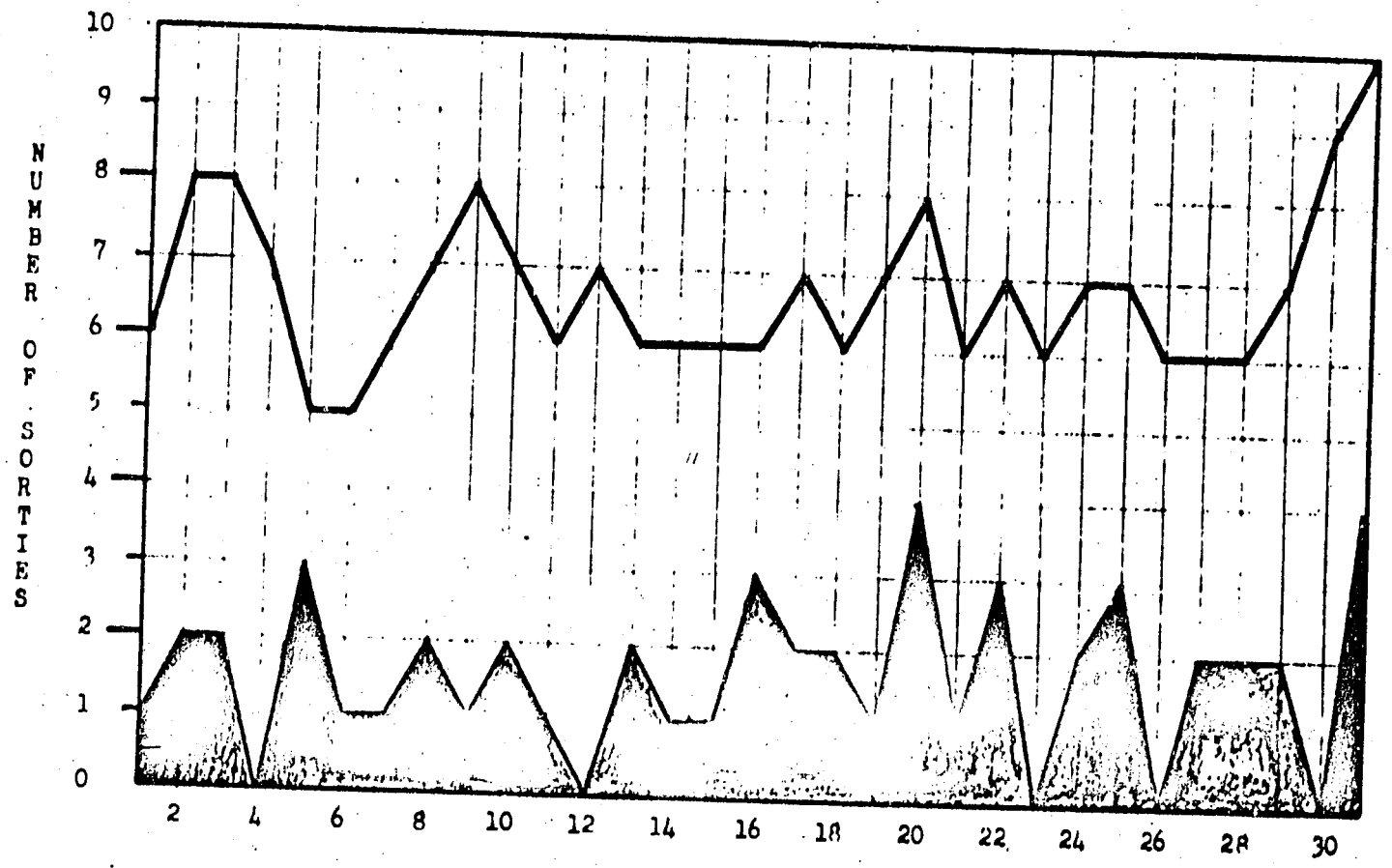

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Fig 1A

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Armed Sorties Flown versus Sorties Expended

1 -13 June

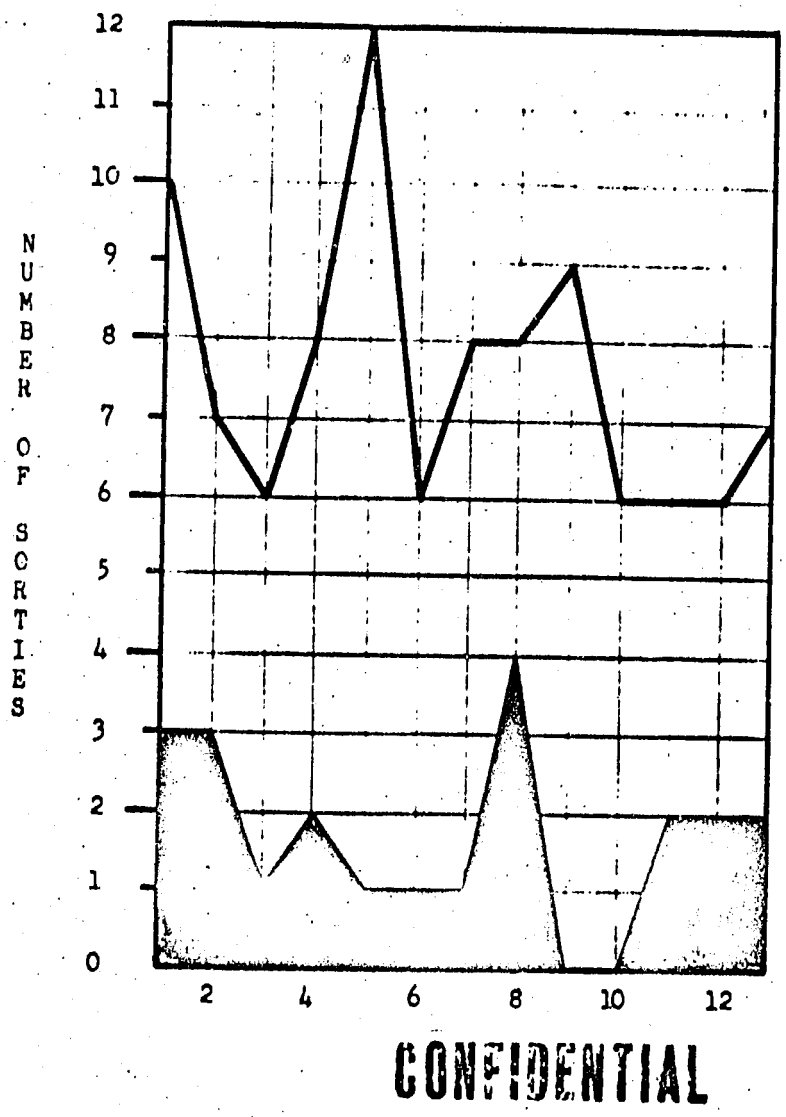

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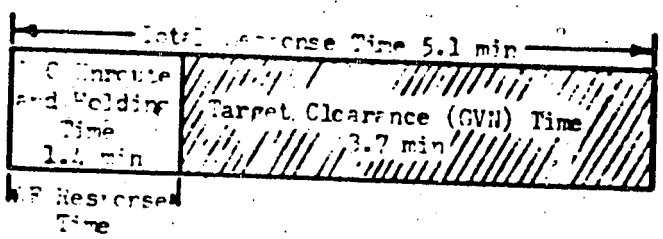
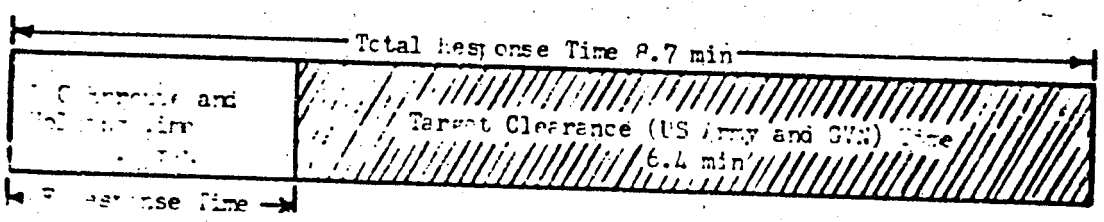
Fig 8B

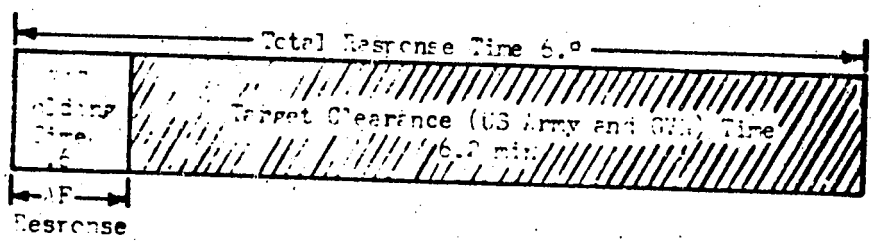
Response Time - Targets in Contact 25 Samples)



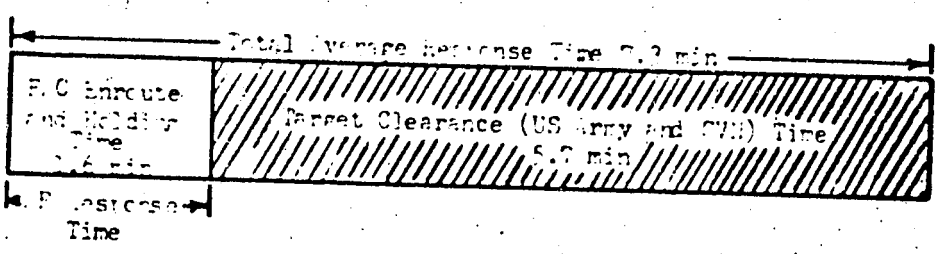
Response Time - Meeting Targets (40 samples)



Response Time - Non Time Sensitive Targets (25 Samples)



Response Time - All Targets (90 Samples)



This delay was due to the time required to obtain a clearance to fire. For TIC situations, the ground commander's immediate clearance was usually all that was required. However, in some cases, a Vietnamese political clearance had to be obtained before the FAC could expend ordnance. For the other two catagories of targets, both the Army ground commander's and GVN political clearance normally had to be obtained. The overall results of the Misty Bronco evaluation were very favorable and the ground commanders were most enthusiastic with the concept. The armed FAC provided a limited but highly responsive airstrike capability to the ground commander and was immediately available for TIC situations. The response time for Air Force strike support to an immediate close air support request was greatly reduced by the immediate availability of the FAC. In addition, small groups of VC, enemy vehicles, sampans, etc., could be contained by the armed FAC until heavier fire support could be brought to bear on the target, or as in many cases, the FAC fire power was sufficient to destroy the target. A short summary of 16 support opportunities extracted from the daily operational summary reports are provided to illustrate the effectiveness and value of the armed FAC concept.

(1). (7 April TIC). The ground commander requested immediate CAS at 1630 after having been pinned down by small arms and RPG fire at XT 579245. Issue 25 (armed FAC) requested strike clearance through the Division TACP at 1603 and received clearance at 1609. Due to the ground situation Issue 25 could not expend until 1613. He was off target at 1623, expending 14 HE rockets and 800 rounds of 7.62mm to suppress enemy fire while the ground forces executed a retrograde maneuver. The FAC was credited with one bunker damaged and silencing the enemy guns. An Army light fire team then arrived on station. Contact was not reestablished. TAC Air was not required.

(2). (15 April TIC). Issue 25 was airborne on a CAF sortie supporting maneuvering ground forces. VC were spotted in the trees ahead of the advancing troops and TAC Air was requested at 1430. Dice 61 (2 F-100s) responded and was on target at 1450. Hawk 03 (2 F-100s) flight followed at 1500. At the termination of the air strikes, sporadic ground fire was still being received. While artillery was being alerted for support, the ground commander requested the FAC to expend (1555). Issue 25 was on target at 1556, and off at 1605, expending 14 HE rockets and 500 rounds 7.62mm. Two secondary explosions were reported by the ground commander.

(3). (26 April). During the course of a normal preplaned strike at XT 550290, VC began to scatter from bunkers in the target area. The FAC requested immediate TAC Air at 1430 after completion of his preplanned strike. From 1430 until 1505 the FAC contained the enemy until Boxer 01 (2 F-4s) flight arrived on station. The FAC expended 14 HE rockets and 1975 rounds of 7.62mm and was credited with 2 KBA, 1 secondary explosion and 1 secondary fire. TAC Air accounted for an additional 3 KBA and 6 secondary explosions.

(4). (5 May TIC). Issue 24, on a VR mission, received a call for assistance at 1145 from a ground force engaged with VC at coordinates XT 600228. He arrived over the scene at 1148 and spotted for an Army light fire team until 1205. TAC Air was requested at 1205. Strike clearance on the target grid for both the fighters and FAC was received at 1215. No opportunity immediately arose for the armed FAC's ordnance. Hawk 05 (scrambled TAC Air) arrived on station at 1235 and was on target at 1241. During the flights initial passes, ground fire broke out just northwest of the original contact. Issue 24 held the Hawk flight high and dry, found VC running in the open at the new location and rolled in to expend in an attempt to contain the enemy troops. Issue 24 received ground fire but took no hits. Hawk flight completed their passes on the VC in the open. A later ground sweep credited the Hawk flight with 4 KBA. Issue 26 relieved Issue 24 on station.

(5). (5 May TIC). Shortly after Issue 26 relieved 24, two additional sets of TAC Air were scrambled at 1345. Artillery saturated the target area until arrival of Hammer 51 (2 F-4s) at 1400 and Devil 81 (2 F-100s) at 1415. TAC Air expended until 1440 at which time an Army light fire team expended. At 1504, VC were observed running into a military structure and the ground commander requested Issue 26 to inhibit their activity until a better offensive position could be achieved. Issue 26 was on target at 1505, off at 1510, expending 7 HE rockets and 200 rounds of 7.62mm. Issue 26 was credited with two military structures destroyed and one damaged.

✓ (6). (5 May TIC). Issue 25, on a CAT for ground forces, saw two VC run into a military structure at XT 499272. The ground commander requested the FAC to expend at 1530. Strike clearance was received through the Division TACP at 1540. Issue 25 was on target at 1545, off at 1555, expending 14 HE rockets. Ground fire was received but no aircraft hits were sustained. Issue 25 was credited with one military structure destroyed, two secondary fires, and two VC KBA by body count.

(7). (16 May TIC). While supporting maneuvering ground forces, the armed FAC was requested to expend on several sniper positions that were holding up the friendly advance. Strike clearance was requested by the FAC at 1127, received at 1131 and he was on target immediately. Fourteen rockets and 2,000 rounds of 7.62mm were expended in silencing the sniper fire. TAC Air was not required. Upon landing, two holes, one in the boom and one in the outboard wing segment, were discovered. The FAC was unaware he was being fired upon.

✓ (8). (22 May TIC). An Army Long Range Reconnaissance Patrol (LRRP) was receiving sniper fire and pinned down at XT 545328. They requested air support at 1930. Issue 25, on a VR mission was nearby and requested a strike clearance immediately. He was able to pinpoint the LRRPs position and was on target immediately upon receiving strike clearance

at 1835. Issue 25 expended 14 HE rockets and 1200 rounds 7.62mm and was off target at 1850. No BDA was available, however the sniper fire terminated and the IRRF team was able to withdraw. TAC Air was not required.

(9) (5 June TIC). Issue 24 was supporting a ground operation at XT 568257 when the ground commander requested immediate CAS. VC in a hedgerow had the friendly troops pinned down. The CAS request was made at 1330 and Issue 24 requested strike clearance also at 1330. A preplanned TAC Air flight was diverted and arrived on station in 4 minutes at 1334. Strike clearance was received at 1335. However, the friendly forces could not withdraw to a safe distance to allow the TAC Air to expend, due to intense enemy fire. The ground commander requested the FAC's ordnance at 1340 to provide suppression fire so that the friendly troops could withdraw. The FAC was on target immediately and off at 1352, expending 14 HE rockets and enabling the ground forces to safely withdraw. TAC Air was on target immediately at 1352 and off at 1607.

(10). (11 June TIC). An armed FAC was supporting a ground operation at XT 634325. The ground commander requested immediate close air support at 1620 and immediate TAC Air was also requested at 1620. Strike clearance was received at 1621. The FAC was on target at 1625, off at 1635, expending 14 HE rockets and 1,000 rounds of 7.62mm. TAC Air arrived on station at 1641, on target at 1642, off at 1703. Ground fire was received but there were no reported aircraft hits.

(11). (7 April). Issue 26 sighted a loaded raft at XT 590332. He requested a strike clearance at 1341, received clearance at 1343. Issue 26 was on target at 1345 and off 1400. Thirteen HE rockets and 800 rounds of 7.62mm were expended. BDA was one raft destroyed and one secondary explosion.

(12). (22 April). While on a VR mission Issue 25 discovered a new sampan at coordinates XT 280035 and received ground fire from the surrounding area. Strike clearance was requested at 1000, received at 1020. Issue 25 was on target at 1021, off at 1031. He expended 13 HE rockets and 2,000 rounds 7.62mm. BDA was one sampan destroyed.

(13). (27 April). While on a VR mission Issue 04 sighted 8 to 10 VC in the open at coordinates XT 140321. Strike clearance was requested immediately at 1613 but not received until 1638. Issue 04 was on target at 1645 and off at 1700, expending 14 HE rockets and 500 rounds 7.62mm. Two enemy KBA were credited to the FAC. Artillery rather than TAC Air was used to saturate the target area after the Misty Bronco strike because of the enemy's dispersion.

(14). (19 May). Issue 05 sighted an enemy sampan with two VC at XT 699504. Strike clearance was requested at 1555 and received at 1600. Issue 05 was on target at 1600, off at 1605, expending 14 HE rockets. BDA was one sampan destroyed, two enemy KBA (possible).

(15). (2 June). Two VC and four enemy sampans were sighted by armed FACs at XT 311021. Strike clearance was requested at 1108 and received at 1112. The FAC was on target immediately, off at 1131. A second FAC was then on target at 1131 and off at 1140. BDA was two enemy KBA and four sampans destroyed.

(16). (13 June). While on a VR mission Issue 04 sighted a small group of armed VC at XS 219940. He requested strike clearance at 1615, and received clearance at 1616. Issue 04 was on target immediately, off at 1625, expending 11 HE rockets and 2,000 rounds of 7.62mm. BDA was three enemy KBA.

Summary of BDA accummulated by the armed FACs:

15 enemy KBA confirmed, 7 KBA possible
13 sampans destroyed, 6 damaged
7 transportation units (Buffalo) destroyed
2 rafts destroyed
7 military structures destroyed, 6 damaged
1 motorcycle destroyed
7 secondary explosions
5 secondary fires
1 food cache destroyed
4 bunkers destroyed, 2 damaged
2 tunnel entrances uncovered
Enemy sniper fire silenced on two occasions in support of TIC.

B. Personnel and Materiel Requirements

Personnel: Munitions maintenance personnel requirements (462X0) for OV-10A aircraft support had not been established at the beginning of the Misty Bronco evaluation. Two 462X0 personnel were assigned TDY as a minimum required for the duration of the exercise to provide support for the M-60C guns. For a sustained operation this number proved to be inadequate. Four (462X0) munitions maintenance specialist to maintain and service the guns and rocket systems and one 461X0 to maintain the rocket and ammo storage areas and for rocket build-up were determined as the minimum requirement for each FCL supporting 4 to 6 OV-10 aircraft. AFM 26-3, "AF Manpower Determinants", 8 May 1969, provided a requirement for munitions specialist (462X0) based on the number of UE aircraft. This manual established a requirement for a total of 10.4 (462X0) personnel for each 8 OV-10 aircraft and this figure is approximately the same as determined by the evaluation. However 461X0 personnel are authorized for large bomb dump operations only, but one (461X0) was believed required at each FCL to maintain the local TACP storage areas and to provide coordination with the host Army units. Unit UDI changes will be required to obtain these required munitions personnel. No additional personnel requirements were identified.

Materiel: Several problems and deficiencies were identified during the evaluation which did not effect the Misty Bronco exercise to any great extent but which required resolution before enlargement of the armed CV-10A program could be accomplished. Additional storage facilities for 2.75" HE rockets and 7.62mm munitions had to be constucted to meet the criteria established in AFM 127-100. The CV-10A aircraft were delivered in-country, each with 4 M-60C machine guns. However, no initial spares stock list (ISSL) had been established and bench stock was not available to maintain the M-60C guns. In addition, no stock level requirements had been established for 7.62mm ammunition and 2.75" HE rockets to be used by armed CV-10A FACs. Both items are critical supply items in SEA. From consumption data compiled for the six CV-10 in the Misty Bronco operation approximately 15,000 to 25,000 additional 2.75" HE rockets per month would be required if all CV-10A aircraft (58 total) operating in-country were to be armed. Approximately 700,000 to 1,000,000 rounds of 7.62mm would be consumed monthly. Additional airlift requirements from the Main Support Bases (MSB) to each FOL would also be required. No other significant materiel requirements were identified.

SECTION V

Conclusions and Actions

A. Conclusions:

The results obtained during the armed CV-10A evaluation validate the effectiveness of the armed FAC. Air Force response times to Army requests for immediate close air support were greatly reduced by the immediate availability of the armed FAC and in many instances the response was instantaneous. In addition, the armed FAC provided increased Air Force participation in small TIC situations. The armed FAC also was able to contain isolated enemy targets until heavier fire support could respond and in some instances destroy or neutralize small fleeting targets that otherwise might have escaped.

Although six CV-10A aircraft were utilized in this test, the normal assignment of CV-10A's is three or four to support each brigade. Four aircraft would be required to provide continuous strike presence (12 hour day) over a Brigade AO with a sortie rate of 1.3 per day, per aircraft. This is based on a programmed 100 hours per month, per aircraft, with sortie length of 2.5 hours.

Additional munitions maintenance specialists (462X0/461X0), approximately 70, must be approved for authorization on unit UDI documents to support total country wide armed FAC operations.

B. Actions:

Based on the overall success of the Misty Bronco Evlauation, the Commander 7AF, on 5 June 1969, directed the arming of all CV-10A aircraft operating in-country in support of US Army forces. However, pending the authorization of additional 462X0 personnel to maintain and service the M-60C machine guns and establishing adequate materiel support for the M-60 guns, the decision was made to arm the CV-10 aircraft in two phases.

Phase I involved arming all CV-10 aircraft with 2.75" HE rockets only, (a total of 50 aircraft supporting four US Army Divisions and two separate Brigades). Phase I was completed on 1 July 1969.

Phase II involves arming all CV-10 aircraft with both M-60C machine guns and 2.75" HE rockets. Estimated start date is undetermined at this time.