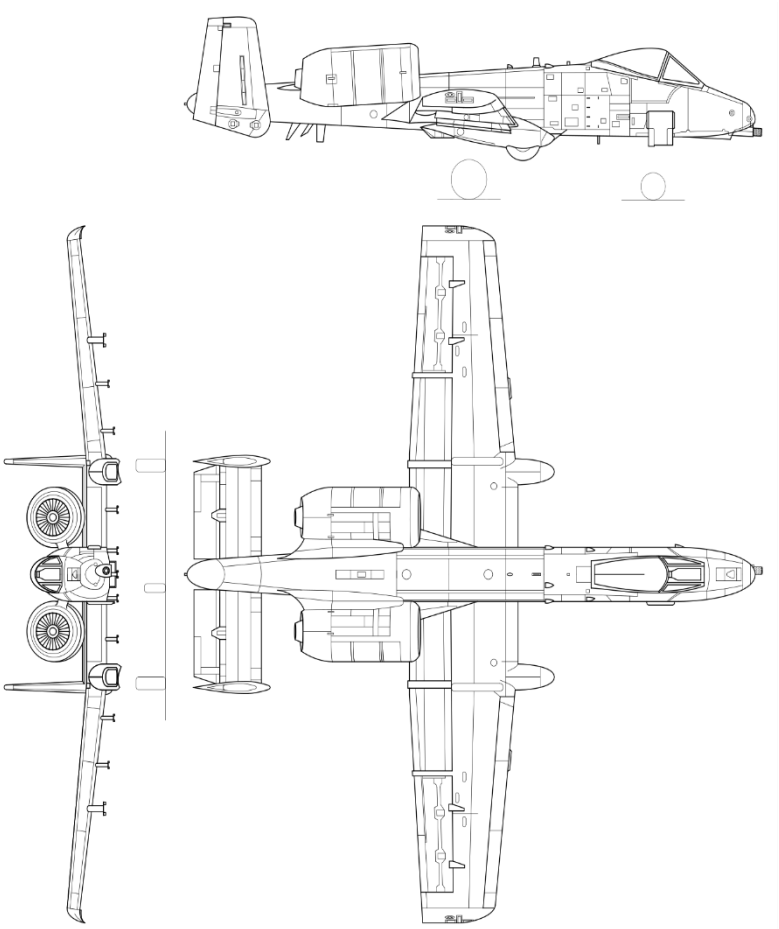
VIRTUAL UNITED STATES AIR FORCE PILOT QUALIFICATION HANDBOOK for the A-10 THUNDERBOLT II



APPROVED FOR USE BY
COMMANDER, AIR COMBAT COMMAND &
COMMANDER, AIR EDUCATION AND TRAINING COMMAND

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COURSE INTRODUCTION

Mission Qualification Training (MQT) is a training program that upgrades newly assigned crewmembers to Combat Mission Ready (CMR) or Basic Mission Capable (BMC) to accomplish the unit mission. Depending on your assigned airframe, this may include basic fighter tactics, various air-to-ground strike profiles, and/or combat air patrol techniques. Mission qualification training for the A-10A will be conducted at **Davis – Monthan AFB**, Arizona.

Module 100, *Local Area Orientation & Aircraft Familiarization* prepares the pilot for the advanced training modules. The Local Area Orientation (LAO)/Instrument element is mandatory for all pilots and will be accomplished in conjunction with the pilot's first MQT sortie. These training flights, conducted in the T-38 trainer, acclimate the pilot to the surrounding training area and allow the pilot to adjust to the local operating area in which advanced training will be conducted. **Completion of Module 100 will earn the pilot the qualification of Basic Mission Capable (BMC), which will allow the pilot to operate the aircraft in operational and training environments, under the instruction of qualified instructor pilots. Module 100 is designed to be self-paced, meaning the pilot needs only report the completion of the sorties to training staff for credit.**

Module 200, *Air Combat Training* introduces the pilot to the art of Air Combat maneuvering. During these sorties the pilot will demonstrate an understanding of the Basic Fighter Maneuvers (BFM) while gaining experience through completing numerous engagements online with the pilot's operational unit's instructor pilots. Pilots will train in offensive and defensive BFM in preparation for defensive fixed wing ACBT and offensive/defensive anti-helicopter ACBT. At a minimum, pilots will train for successful A/A self-defense at a goal of 50 percent against dissimilar aircraft or helicopters.

Module 300, *Surface Attack Tactics* introduces the pilot to Air-to-Ground Tactics. During these sorties the pilot will study and then demonstrate an understanding of the basic methods of employing Air-to- Ground weapons while gaining experience through completing numerous engagements online with the pilot's operational unit's instructor pilots. Pilots will conduct preplanned target strikes and close air support (using JTAC and FACs) while in a contested environment. **Upon completion of Modules 200 & 300, the pilot will be certified as Combat Mission Ready (CMR).**

Module 400, *Specialized Training* is an optional training module that provides CMR pilots with additional qualifications, such as Forward Air Controller (Airborne) (FAC(A)), Instructor Pilot (IP) training, and Combat Search and Rescue (CSAR). These qualification "upgrades" require multiple sorties of each type to certify, and can be conducted as part of either standalone training flights or during operational exercises/events.

OPERATIONAL REQUIREMENTS / SETTINGS

REQUIRED SIMULATOR SETTINGS

Unlimited fuel:	Off	MSFS realism settings panel
"G" Forces:	Off	MSFS realism settings panel
Damage & Collisions:	Off	MSFS realism settings panel
Realism Sliders:	Max	MSFS realism settings panel
Air Traffic Tags:	Off	MSFS traffic control panel

REQUIRED PROGRAMS

The following programs are required in order to initially qualify to enrollment into MQT training:
MICROSOFT FLIGHT SIMULATOR X (ANY VERSION) or LOCKHEED MARTIN'S PREPAR3D (ANY VERSION)
xPlane is currently being evaluated by vAFOTEC for use as a combat platform, and is not currently available as a ACC-platform.

VERTICAL REALITY SIMULATIONS' *TACPACK* - **HTTPS://WWW.VRSIMULATIONS.COM/TACPACK.PHP**
TacPack is a true single and multi-player tactical combat engine for FSX or P3D. TacPack features the ability to spawn AI ships (e.g. aircraft carriers with pitching, rolling decks), refueling tankers, drones, and lethal SAM sites directly into the simulation via a handy in-game menu.
NOTE: TacPack is ONLY required if you wish to become a mission-qualified combat pilot. Pilots who do not wish to purchase a TacPack license will be allowed to operate ACC airframes, but will not become earn a Combat Mission Ready status and will be limited to non-combat flight operations (e.g. ferry flights). Therefore, a TacPack license is STRONGLY recommended.

JOINFS - HTTP://PMEM.UK/JOINFS/
JoinFS provides for latency-free multiplayer missions through a peer-to-peer style network.

FSX@WAR/CCP -- HTTPS://FSXWAR.COM/.
FSX@War is used to create the training scenarios and CCP is used to create moving convoys, surface-to-air missiles and other wartime effects.

INSTALLATION INFORMATION

Source: SkyVector, AirNav

DAVIS MONTHAN AIR FORCE BASE

Coordinates: N32°9.98' / W110°52.99'
Located 02 miles SW of Tucson, Arizona on 400 acres of land.
Estimated Elevation is 2704 feet MSL.
Magnetic Variation from 2000 is 12° East
Operations Data

Airport Use:	Private Use	A.R.T.C.C.:	ALBUQUERQUE
Activation Date:	April 1940	F.S.S.:	PRESCOTT
Status:	Operational	NOTAMs Facility:	PRC (NOTAM-D available)
Control Tower:	Yes	Sectional Chart:	PHOENIX
Seg-Circle:	No	Customs:	Intl Airport of Entry
Beacon:	Clear-Green (Lighted Land Airport)	Airspace Analysis: Attendance:	NOT ANALYZED
Wind Indicator:	Yes, Not Lighted		

NEARBY NAVIGATION AIDS

ID	Name	Freq	Radial / Range
DMA	DAVIS MONTHAN	117.60	331° 0.4
TUS	TUCSON	116.00	008° 4.6
FHU	LIBBY	113.60	309° 43.8
ARH	FORT HUACHUCA	111.60	309° 44.5

ID	Name	Freq	Bearing / Range
RYN	RYAN	338	251° 14.3
AVQ	MARANA	245	299° 22.4
RBJ	ROBLES	220	245° 24.9
DAO	DRAGOO	410	129° 44.3

RUNWAY INFORMATION

RUNWAY 12/30

Dimensions:	13643 x 200 feet / 4158 x 61 meters
Surface:	PEM
Weight Limits:	47 /R/B/W/T
Edge Lighting:	High Intensity

	Runway 12	Runway 30
Coordinates:	N32°10.81' / W110°53.89'	N32°9.15' / W110°52.09'
Elevation:	2589.0	2704.0
Traffic Pattern:	Left	Right
Markings:	Precision Instrument	Precision Instrument
Glide Slope Indicator	P4L (3.00° Glide Path Angle)	P4L (3.00° Glide Path Angle)
Approach Lights:		ALSF1 Standard 2,400-Foot-High-intensity Approach Lighting System with sequenced flashers, CATEGORY I Configuration.
REIL:	Yes	

MODULE 100: LOCAL AREA ORIENTATION & FAMILIARIZATION FLIGHTS

SORTIE 101: LOCAL AREA FAMILIARIZATION

OBJECTIVE: Introduce and familiarize pilot with aircraft and local operating areas.
LOCATION: Barry M. Goldwater Range, Tucson AZ
DATE & TIME: Daylight Hours
WEATHER: REAL WORLD
FLIGHT RULES: VISUAL FLIGHT RULES
ROUTE: DM1.ROSKR BUGGS D+30 NOLLS KGXF GBN V94 CROME
PLANNED ALTITUDE: 8500'

This flight will take you to the SELLS MOA and Restricted Area 2301 E/2304/2305, which are part of DM AFB's Barry M. Goldwater Range Complex, located to the SW of the installation, as well as with Gila Bend AF Auxiliary Field. This mission is simply to acclimate you to the procedures for entering and exiting the Tucson Class C / Terminal Area and introduce you to the training environment in which you will be training.

MISSION INSTRUCTIONS:

1. Conduct the required preflight checks and prepare aircraft for takeoff.
2. (IF ATC IS AVAILABLE: Request VFR departure to the south and flight following. Taxi to the active runway depending on weather/wind conditions (or as assigned by ATC).
3. After departure, turn to the northwest and proceed BUGGS to enter the SELLS MOA. Conduct a flight pattern from generally east to west and observe the target areas -- this is the "D+30" portion of your flight plan.
4. After exiting the MOA, continue east to KGXF. When you have a visual on the airfield, navigate accordingly to set up for an approach. Perform at least five (5) touch and go landings on either runway, depending on the wind/weather. After completing the touch and go landings, turn eastbound and follow V66 back to the TUS terminal area.
5. After reentering the Class Charlie airspace, conduct one overhead flight pattern at the airfield and then recover.

SPECIAL INSTRUCTIONS:

If ATC is not available, you must restrict your flight to normal VFR operations only. If ATC is available, at your discretion, you may activate the SELLS 1 MOA FROM SFC – 9000 and conduct basic military operations.

SORTIE 102: NIGHTTIME OPERATIONS & PRECISION APPROACH

OBJECTIVE: Conduct a flight under instrument rules during night.
LOCATION: Barry M. Goldwater Range, Tucson AZ
DATE & TIME: **01:00Z / 19:00L**
WEATHER: REAL WORLD
FLIGHT RULES: INSTRUMENT FLIGHT RULES (IFR)
ROUTE: DM1.ROSKR BUGGS D+30 NOLLS KGXF GBN V94 CROME
PLANNED ALTITUDE: 8500'
REQUIRED FILES:

This sortie is a carbon copy of #101 but is conducted at night. You will enter the SELLS MOA and Restricted Area 2301 E/2304/2305,, perform a low pass at Gila Bend AFAF, and recover at DMAFB using a precision approach method.

MISSION INSTRUCTIONS:

1. Conduct the required preflight checks and prepare aircraft for takeoff.
2. (IF ATC IS AVAILABLE: Request VFR departure to the south and flight following. Taxi to the active runway depending on weather/wind conditions (or as assigned by ATC).
3. After departure, turn to the northwest and proceed BUGGS to enter the SELLS MOA. Conduct a flight pattern from generally east to west and observe the target areas -- this is the "D+30" portion of your flight plan.
4. After exiting the MOA, continue east to KGXF. When you have a visual on the airfield, navigate accordingly to set up for an approach. Perform at least five (5) touch and go landings on either runway, depending on the wind/weather. After completing the touch and go landings, turn eastbound and follow V66 back to the TUS Class C.
5. Perform a TACAN approach to the active runway and recover.

SORTIE 103: LOW ALTITUDE FLIGHT OPERATIONS

OBJECTIVE: Conduct a visual military training route.
LOCATION: Barry M. Goldwater Range, Tucson AZ
DATE & TIME: Daytime Hours
WEATHER: REAL WORLD
FLIGHT RULES: VISUAL FLIGHT RULES
ROUTE: DM1.REDDY SSO223045 VR260 GBN207039 NOLLS GBN V94 CROME
PLANNED ALTITUDE: 8500'

In preparation for Modules 200 & 300, this training evolution will prepare you for the low-level high-speed flight. This training will be exceptionally useful during periods of hostilities in which terrain following is needed to avoid anti-aircraft fire and/or enemy aircraft. You will fly VR 260 from Point D to Point M at a ground speed of 350kts and at an altitude of just over 1500' AGL.

MISSION PLAN:

1. Conduct the required preflight checks and prepare aircraft for takeoff.
2. (IF ATC IS AVAILABLE: Request VFR departure to the east and flight following. Taxi to the active runway depending on weather/wind conditions (or as assigned by ATC).
3. Depart to the east on the DAVIS MONTHAN 1 departure, REDDY TRANSITION. At REDDY, you will proceed direct to point D of VR260 which is at SSO 223/045.
4. Follow VR-260 according to the FLIP AP/1B (see image to right), and exit at point M. Stay within the altitude blocks.
5. After exiting at point M, turn to the North and exit the MOA at NOLLS.
6. After NOLLS, follow V94 to CROME and recover at Davis Monthan AFB.

SPECIAL INSTRUCTIONS:

In the remarks of your flight plan, type the following "vUSAF Training Flight – VR 260 Enter D Exit M; Activate Sells 1 MOA, R-2301E". If VATSIM ATC is available, follow all departure/arrival instructions. Notify ATC when you enter and exit the route. Upon entering the route, you will be under visual rules only. Even if you have elected to receive flight following, most VATSIM controllers will terminate your radar service upon entering an inherently military area. **Therefore, you are ultimately responsible for your own aircraft and the proper separation from other network A/C (welcome to MARSA!)**

ROUTE DESCRIPTION:

Altitude Data	Pt	Fac/Rad/Dist	Lat/Long
Cross at 10 AGL to or as assigned	A	TUS 034/31	N32°27.00' W110°29.00'
03 AGL B 15 AGL to	B	SSO 298/28	N32°35.00' W109°41.00'
03 AGL B 15 AGL to	C	SSO 272/19	N32°21.00' W109°37.00'
03 AGL B 70 AGL to	D	SSO 223/45	N31°51.00' W110°00.00'
03 AGL B 15 AGL to	E	TUS 159/21	N31°45.00' W110°51.00'
65 MSL to	F	TUS 205/28	N31°43.00' W111°15.00'
05 AGL B 30 AGL to	G	TUS 216/40	N31°39.00' W111°30.00'
05 AGL B 30 AGL to	H	TFD 162/74	N31°39.00' W111°46.00'
05 AGL B 30 AGL to	I	TFD 181/68	N31°47.00' W112°13.00'
05 AGL B 30 AGL to	J	GBN 155/60	N31°58.00' W112°27.00'
05 AGL B 30 AGL to	K	GBN 153/52	N32°07.00' W112°27.00'
05 AGL B 30 AGL to	L	GBN 169/47	N32°10.00' W112°43.00'
05 AGL B 30 AGL to	M	GBN 207/39	N32°28.00' W113°11.00'

TERRAIN FOLLOWING OPERATIONS: Authorized from A to E and F to M.

ROUTE WIDTH - 2NM either side of centerline from A to D; 1NM right and 2NM left of centerline from D to E; 2NM right and 1NM left of centerline from E to F; 3NM either side of centerline from F to K; 2NM either side of centerline from K to L; 2NM right and 3NM left of centerline from L to M.

SORTIE 104: BASIC FORMATION TRAINING

OBJECTIVES: Learn proper procedures and techinques for formation flying
LOCATION: VR 260, SELLS MOA, R-5301
DATE & TIME: Daylight
WEATHER: REAL WORLD
FLIGHT RULES: INSTRUMENT FLIGHT RULES (IFR)
FLIGHT PLAN: DM1.REDDY SSO223045 VR260 GBN207039 GBN V94 CROME
(or as assigned by IP)
ALTITUDE: Pilots discretion

This flight will follow the same plan as Sorties 103 – through the restricted area, down IR-235 and back to Hill AFB for recovery. However, you will be joined on this flight by your instructor pilot (IP), in which you are to follow along as the #2 aircraft. Your settings will undoubtedly be slightly different, you will literally have to "wing it" using a good sense of the situation (situational awareness – SA), your knowledge and experience of how the F-35 flies.
The purpose of this mission is to offer you an opportunity to experience firsthand formation flight and certify you as ready to begin the advanced levels of combat training. Do not be discouraged if you do not fly a perfect formation on the first time or two out - you may repeat the exercise as many times as needed till you are able to comfortably get into and stay in position with the lead aircraft.

MISSION PLAN:

1. Conduct the required preflight checks and prepare aircraft for takeoff.
2. (IF ATC IS AVAILABLE: Request VFR departure to the east and flight following. Taxi to the active runway depending on weather/wind conditions (or as assigned by ATC).
3. As the #2 pilot, you will follow all commands and directives of the #1 pilot. Follow your Flight Lead as he departs the active runway and proceeds east on the DAVIS MONTHAN 1 departure, REDDY transition. At REDDY, you both will turn direct to point D of VR260 which is at SSO 223/045.
4. Follow your IP/Flight Lead onto VR-260. Stay within the altitude blocks and within 500' of your IP.
5. After exiting at point M, but before exiting the MOA at NOLLS, you and your IP will switch positions, and you will become the flight lead, and your IP will become the wingman. Exit the MOA and fly direct to Gila Bend VOR. After Gila Bend, turn east and follow V94 to CROME and then recover at KDMA.

SPECIAL INSTRUCTIONS

Your IP may fly a route different from this flight, in which case, you should follow all directions provided by your IP.

If you are unable to schedule a time to conduct your formation flight live online, this flight may also be conducted with a non-IP pilot or by using a pre-recorded flight. You be responsible for recording your flight to submit to your IP for grading purposes.

MODULE 200: AIR COMBAT TRAINING MODULE

SORTIE 201: ADVANCED FORMATION MANEUVERS

OBJECTIVES: Show proficiency in conducting advanced formation maneuvers.
LOCATION: SELLS MOA, R-5301
DATE & TIME: Daylight
WEATHER: REAL WORLD
FLIGHT RULES: INSTRUMENT FLIGHT RULES (IFR)
FLIGHT PLAN: DM1.REDDY SSO223045 VR260 GBN207039 GBN V94 CROME
(or as assigned by IP)
ALTITUDE: Pilots discretion

MISSION INSTRUCTIONS:

In this sortie you shall also be introduced to advanced formation flight maneuvers such as route formations, turning rejoins, hook turns, check turns, shackles and etc. You will need to become intimately knowledgeable with the indicated reference material to be successful in this course.
Use basic formation maneuvers to depart your installation and enter the local MOA with your unit IP. Once inside the MOA, follow your instructor's directions

SORTIE 202: OFFENSIVE BASIC FIGHTER MANEUVERS

During this sortie, you shall practice offensive BFM with your IP.
OBJECTIVES: Practice offensive basic fighter maneuvers against an A/A adversary.
LOCATION: SELLS MOA, R-5301
DATE & TIME: Daylight
WEATHER: REAL WORLD
FLIGHT RULES: INSTRUMENT FLIGHT RULES (IFR)
FLIGHT PLAN: DM1.REDDY SSO223045 VR260 GBN207039 GBN V94 CROME
(or as assigned by IP)
ALTITUDE: Pilots discretion

MISSION INSTRUCTIONS

1. Use formation maneuvers to depart your installation and enter the local MOA with your unit IP.
2. With your IP at a minimum distance of 1-2NM from your position, close and engage the IP with the intention to maneuver behind for a gunshot within the allowed parameters outlined in vAFI 11-415.
3. A minimum of five (5) engagements lasting no longer than 2 minutes shall be performed with your IP. If no hit / kill is scored within the allotted time, the engagement is considered a draw. Both you and the IP shall then disengage, separate and then reengage in a new round and repeat the exercise.

SORTIE 203: DEFENSIVE BFM / GUN DEFENSE

During this sortie you shall practice defensive BFM with your IP

OBJECTIVES:	Practice offensive basic fighter maneuvers against an A/A adversary.
LOCATION:	SELLS MOA, R-5301
DATE & TIME:	Daylight
WEATHER:	REAL WORLD
FLIGHT RULES:	INSTRUMENT FLIGHT RULES (IFR)
FLIGHT PLAN:	DM1.REDDY SSO223045 VR260 GBN207039 GBN V94 CROME (or as assigned by IP)
ALTITUDE:	Pilots discretion

MISSION PLAN:

Use advanced formation maneuvers to depart your installation and enter the local MOA with your unit IP. With your IP behind your 3/9 line within 1.0 NM or less, maneuver your jet successfully to prevent your IP from getting into position for a gun shot on your aircraft (follow vAFI 11-415 for gun kill parameters). To be successful you need to prevent your IP from successfully hitting you for sixty (60) seconds. A minimum of five (5) engagements should be performed during this sortie.

SORTIE 204: 2 VS. 1 DEFENSIVE ACBT

During this sortie, you shall practice offensive BFM with your IP.

MISSION SETUP

Objectives:	Practice 2-ship defense against a single adversary
Location:	
Date & Time:	
WX:	
Flight Plan:	
Altitude:	
Required Files:	

MISSION PLAN:

Use advanced formation maneuvers to depart your installation and enter the local MOA with your unit IP. With your IP at a minimum distance of 1-2NM from your position, close and engage the IP with the intention to maneuver behind for a gunshot within the allowed parameters outlined in vAFI 11-415. A minimum of five (5) engagements lasting no longer than 2 minutes shall be performed with your IP. If no hit / kill is scored within the allotted time, the engagement is considered a draw. Both you and the IP shall then disengage, separate and then reengage in a new round and repeat the exercise.

SORTIE 205: AIR COMBAT QUALIFICATION

OVERVIEW

MISSION SETUP

Objectives: demonstrate proficiency in OFFENCIVE & defensive BFM
Location:
Date & Time:
WX:
Flight Plan:
Altitude:
Required Files:

MISSION PLAN:

Use advanced formation maneuvers to depart your installation and enter the local MOA with your unit IP. During this sortie, you shall demonstrate your proficiency in offensive and defensive BFM with your IP.
During this exercise, you will depart the airfield and proceed to set up patrol in the MOA. Once established in the MOA, your IP will depart a remote field and will enter the MOA. From this point, use your training to evade your IP while attempting to set up for the kill shot on him.
A minimum of five (5) engagements lasting no longer than 2 minutes shall be performed with your IP. If no hit /kill is scored within the allotted time, the engagement is considered a draw. Both you and the IP shall then disengage, separate and then reengage in a new round and repeat the exercise.

SPECIAL INSTRUCTIONS:

MODULE 300: SURFACE ATTACK TACTICS MODULE

The purpose of the below sorties is to introduce you to the art of Air-to-Ground Tactics. During these sorties you will study and then demonstrate an understanding of the basic methods of employing Air-to- Ground weapons while gaining experience through completing numerous engagements online with your operational unit's instructor pilots. Instructor Pilots will be need to judge whether or not that the student grasps the concepts and has adequately demonstrated an ability to perform in the A/G environment. IP's shall submit a request ticket to AETC indicating if/when the student has successfully completed each of the above sorties. File MISREP via your vPortal.

SORTIE 301: BASIC SURFACE ATTACKS

MISSION SETUP

Objectives:	Practice conventional WD, Maverick and LATN.
Location:	
Date & Time:	1900 Local / 0100Z
WX:	Real World Weather – no minimums required
Flight Plan:	
Altitude:	
Required Files:	

MISSION PLAN:

SPECIAL INSTRUCTIONS:

In this sortie, you will learn how to perform the basic Air-to-Ground maneuvers such as a chandelle, dive and recovery, and loft. Using these maneuvers, you will learn how to properly keep a target in sight, find the proper "sight picture" for weapon release, and how to maneuver after release in a manner that makes it difficult for ground defenses to hit your aircraft. File MISREP in the vPortal for each sortie, indicate this mission number and total hours.

SORTIE 302: TACTICAL SURFACE ATTACK

Specific Mission Tasks:

Route/threat planning, weapons system checks, HATF, AGSM, medium altitude ingress/egress, tactical WD simulating combat munitions, threat reactions, mutual support, visual lookout, battle damage check, in-flight report, authentication procedures, LATF, and tactical recovery/initial.

MISSION SETUP

Objectives:	demonstrate proficiency in WEAPONS DELIVERY and Maverick ON PREPLANED TARGETS.
Location:	Utah Test and Training Range
Date & Time:	1900 Local / 0100Z
WX:	Real World Weather – no minimums required
Flight Plan:	
Altitude:	
Required Files:	

MISSION PLAN:

SPECIAL INSTRUCTIONS:

SORTIE 303: CLOSE AIR SUPPORT

MISSION SETUP

Objectives:	DEMONSTRATE TACTICAL MISSION EMPLOYMENT IN A CLOSE AIR SUPPORT SCENARIO
Location:	Utah Test and Training Range
Date & Time:	1900 Local / 0100Z
WX:	Real World Weather – no minimums required
Flight Plan:	
Altitude:	
Required Files:	

MISSION PLAN:

SPECIAL INSTRUCTIONS:

Use advanced formation maneuvers to depart your installation and enter the local MOA with your unit IP. During this sortie, you shall practice offensive Close Air Support with your IP. Once in the range, your IP will separate and become the Airborne Forward Air Controller (FAC). He will then use the "9-Line" or "6-Line" strike coordination technique to give targets to be attacked. You will then attack the targets using the specified strike pattern or the best strike pattern for the situation given. In situations where 2 aircraft perform the strike pattern, your IP will decide whether to be "wingman" or "lead" and fly that portion of the pattern. A minimum of 5 strikes must be performed. File MISREP in the vPortal for each sortie, indicate this mission number and total hours.

MODULE 400: SPECIALIZED TRAINING

Mission qualification training for the A-10A will be conducted at Davis – Monthan AFB, Arizona. This training will consist of three modules:

Module 100, *Local Area Orientation & Aircraft Familiarization* prepares the pilot for the advanced training modules. The Local Area Orientation (LAO)/Instrument element is mandatory for all pilots and will be accomplished in conjunction with the pilot's first MQT sortie in the local area unless the pilot is flying in the same local area as in IQT or RQT. These training flights acclimate the pilot to the surrounding training area and allow the pilot to adjust to the local operating area in which advanced training will be conducted. Completion of Module 100 will earn the pilot the qualification of Basic Mission Capable (BMC), which will allow the pilot to operate the aircraft in operational and training environments, under the instruction of qualified instructor pilots.

Module 200, *Air Combat Training* introduces the pilot to the art of Air Combat maneuvering. During these sorties the pilot will demonstrate an understanding of the Basic Fighter Maneuvers (BFM) while gaining experience through completing numerous engagements online with the pilot's operational unit's instructor pilots. Pilots will train in offensive and defensive BFM in preparation for defensive fixed wing ACBT and offensive/defensive anti-helicopter ACBT. At a minimum, pilots will train for successful A/A self-defense at a goal of 50 percent against dissimilar aircraft or helicopters.

Module 300, *Surface Attack Tactics* introduces the pilot to Air-to-Ground Tactics. During these sorties the pilot will study and then demonstrate an understanding of the basic methods of employing Air-to- Ground weapons while gaining experience through completing numerous engagements online with the pilot's operational unit's instructor pilots. Pilots will conduct preplanned target strikes and close air support (using JTAC and FACs) while in a contested environment.

Upon completion of Modules 200 & 300, the pilot will be certified as Combat Mission Ready (CMR).

Module 400, *Specialized Training* is an optional training module that provides CMR pilots with additional qualifications, such as Forward Air Controller (Airborne) (FAC(A)), Instructor Pilot (IP) training, and Combat Search and Rescue (CSAR). These qualification "upgrades" require multiple sorties of each type to certify, and can be conducted as part of either standalone training flights or during operational exercises/events.

GLOSSARY OF TERMS

CREDITS/REFERENCES

DISCLAIMER:
Ethics Regulations prohibit the Department of the Air Force and its employees from using or permitting the use of position, title, or organization names in any manner that would suggest the Department of the Air Force or United States Government endorsement or preferential treatment of any non-federal entity, event, product, service, or enterprise. Neither the Department of the Air Force nor any other component of the Department of Defense or Federal Government has approved, endorsed, or authorized this promotion, activity, or organization.

The Virtual United States Air Force is in no way affiliated with the Department of Defense, Department of the Air Force, or any other federal or government entity.

While based on real world details, the procedures listed in this handbook are for **flight simulation use only.**