Angle Of Attack™

Game Manual

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TECH SUPPORT

For tech support please go to our website at www.3000ad.com

EPILEPSY WARNING

Some individuals may experience epileptic seizures when exposed to certain light patterns of flashing lights. Exposure to these light patterns on television or monitor screens while playing computer games may induce an epileptic seizure in these individuals.

Certain conditions may also induce undetected epileptic symptoms in persons who have no prior history of epileptic seizures.

If you or anyone in your family has an epileptic condition, consult your doctor prior to playing this game.

If you experience any of the following while playing a computer game : dizziness, altered vision, eye twitches, muscle twitches, loss of awareness, disorientation, any involuntary movement or convulsions, you must **IMMEDIATELY** discontinue playing the game and consult your doctor.

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GETTING STARTED

PC SYSTEM REQUIREMENTS

Windows XP SP3 or Vista SP1
Intel Pentium 4 3.4Ghz or AMD Athlon 64 X2 3.0GHz
      Intel Core 2 Duo E6320 or better recommended
      AMD X2 6000 or better recommended
1GB (XP) System RAM. 2GB (Vista) or higher recommended
256MB graphics card **w/ Shader Model 3.0**
      nVidia GeForce 7900. GeForce 8600 GTS or better recommended
      ATI Radeon X1300. Radeon HD2900 XT or better recommended
DirectX 9.0c compatible sound card
Multiplayer requires LAN or broadband connection

MAIN MENU

GAME

This is where you can select a game scenario to play. You can select and fly up to twelve fighters depending on which ones are detected by the game. This allows you to select the right fighter for the mission. You can replay all the scenarios using any of the available fighters in the hangar.

Enter your character name, then choose a fighter asset, missile loadout for it and finally the campaign mission. When done, click on "Start Game" to launch the game.

Each time you start a new scenario, the game auto-saves it for you. So if you die, you can just load that auto-saved game to replay the scenario quickly.

To save a game, press **ESC** to go to the main menu and click on NEW GAME SAVE. To load a saved game, click on the desired game. You can also use CONTINUE to resume the game currently being played.

MULTIPLAYER

Here you can join or host multiplayer games. Refer to the multiplayer section of this manual for more information on this.

OPTIONS

Here you can configure various game options. The defaults should be sufficient to run based on the minimum system requirements for the game. You can restore the default options at any time by using the RESET option. Do this only when at the main menu and not while you are in the game world!

You can map most of the game's commands from the CONTROLLER section. To change a key mapping, **LEFT CLICK** on it and then press the desired key. You cannot change the Xbox360 controller mappings.

QUIT

Quits the game and takes you back to Windows desktop.

GAME CONTROLS

Normally, crafts are in Forward Takeoff And Landing (FTOL) mode, but they also have Vertical Takeoff And Landing (VTOL) capability which allows them to take off from a fixed spot and hover in the air.

To take off - if you are on the ground - press and hold **F** (**LSTICK** forward if using game pad) until the aircraft is off the ground, then press and hold **W** until the craft switches to FTOL mode and flies forward. The higher the thrust limit, the faster the craft will fly.

Landing a craft can only be done in VTOL mode by flying to the lowest possible altitude, then slowing down the craft by pressing and holding **S** until it auto-switches to VTOL mode. Then press and hold **Z** (**LSTICK** back if using game pad) until the craft touches down and LANDED appears in the HUD.

If you have a joystick with a throttle, then the high/low speed settings of the throttle depend on the thrust (W, S) values. For example, if you press **W** to increase thrust until your speed is 350 m/s, then push the throttle all the way forward, the craft will not exceed 350 m/s. So if the craft can reach a max speed of 650 m/s, in order to use the throttle to reach those speeds, you have to press and hold the **W** key until that speed is reached, thus setting the max range of the throttle. If you prefer not to use your joystick throttle, you can disable it in the game's options screen.

During flight, note that the higher your altitude and pitch angle, the less thrust that the aircraft can achieve. If you remain at such altitudes, the aircraft engines may stall and cause you to crash into the ground. You counter this by increasing throttle.

ALTITUDE HOLD SYSTEM

If you fly too close to the ground and are in danger of colliding with it, the aircraft's computer system will sound a verbal warning and display a pull-up warning cue in the cockpit HUD. Aircrafts have a terrain following and avoidance model which allows them to follow the surface terrain without crashing into the ground or into mountains. It is not 100% fail-safe especially at high speeds.

You can also use **ALT+H** (toggle) to manually activate the Altitude Hold System (AHS) as this will keep the aircraft at the current altitude. When turned on, the altitude is set at the current altitude and an **"H"** marker as well as the AHS altitude, will appear to the right of the HUD.

When AHS is on and in normal (FTOL) flight mode, the **F** and **Z** keys can be used to adjust the AHS altitude setting.

AHS will cancel if the craft stalls (50 m/s speed is the minimum speed for the AHS to work) or a low speed setting causes it to enter VTOL. Simply applying thrust and entering FTOL flight mode, will re-activate it.

Even with AHS on, you still have control of the craft, but the AHS will cause the craft to settle at the specified altitude if you don't do anything while in forward flight.

If you are trying to sneak up on hostile forces, you absolutely do NOT want to use AHS when you are within their radar range. If you do, there is a good chance that AHS will increase the craft's altitude, resulting in your aircraft appearing on their radar sensors.

WARNING: AHS will NOT avoid terrain or airborne objects. So, if you are in the direct path of an object, the craft will collide with it. It is not an auto-pilot system.

COCKPIT INTERFACE

1. Your craft's image and stats, as well as your current speed and altitude above ground are shown here. If your shields are fully breached, your armor will start to take damage. Once your shields and armor are fully breached, the ship will start taking even more major damage and will eventually be destroyed. With you in it.

2. The center HUD (Heads Up Display) display contains tactical information.

    Top: Craft's directional heading.

    Center: The four dots marker shows your craft's velocity vector which predicts its future position. Near or on top of that are two indicators depicting the craft's lateral tilt and horizontal pitch scale in 10-degree marks.

    When a missile is armed, the Missile Tracking Designator (MTD) diamond appears.

    Right: Crafts altitude in feet Above Sea Level (ASL) or Above Ground Level (AGL) depending on where you are.

    Current target name and range appear. Range is displayed in Red if the target is less than 50 km away.

    The waypoint marker, number and range appears when you have waypoints set. To fly toward a waypoint, turn the craft until the waypoint marker is at the top of the HUD.

    The Altitude Hold System (AHS) indicator appears here when enabled.

    Left: Current airspeed. Depends on the current thrust (0 – 9) settings. Also shows your fighter's flight profile which can be FTOL, VTOL or LANDED.

    When a missile is armed, it goes into SCAN, TRACK or LOCK displayed on the lower left.

    If you are currently matching the speed of the current target, the match target symbology (M) also appears.

3. If you have a ground target selected, the radar capabilities of the target are shown in the Track Warning Indicator (TWI) box which has one or more carets on either edge as follows:

    Top   You are within the max altitude of the target's radar.
    Bottom   You are within the min altitude of the target's radar.
    Right   You are within the min distance range limit of the target's radar.
    Left   You are within the max distance range limit of the target's radar.

When all carets are ON, the symbol will start to flash, indicating that you have satisfied all the target's acquisition parameters. At that point, a missile launch is very likely.

4.   Your rank, Experience Points, violations and target kills are displayed here. If a mission has a timer, it is also shown here in days:hours:minutes format.

5.   Your craft's gun charge level and missiles count and type armed are shown here. If your guns are completely destroyed, they will fail to recharge and won't fire.

6.   Situation Warning Indicators

STT   Radar currently in Single Target Tracking mode.
LNH   A missile has been launched at you.
LCK   A hostile target has a weapons lock on you.
TRK   You are being tracked and scanned on hostile radar.
EMD   Electromagnetic Disruptor missile jammer. If the EMD is enabled, the cockpit MFDs will display static noise and all missile locks will be lost. The jammer doesn't always work reliably, especially against missiles which can "burn" through it.
SOS   A craft in region is emitting an SOS signal.
IFF   A friendly craft or the current target is emitting an Identify Friend or Foe signal.
A/P   When the auto-pilot is on this indicator indicates its current operating mode.

7.   Icons representing various states of your craft's systems. Red status indicates a destroyed or inoperable system, Yellow indicates extensive damage and/or malfunction and Blue means some minor damage.

HUD	Heads Up Display	NRE	Nuclear Reactor
MLS	Main Life Support	NAV	Navigation Computer
ILD	Inbound Launch Display	COM	Communications Computer
ENG	Engine	MNC	Main Computer
EMD	Electromagnetic Disruptor	WEP	Weapons Systems
SHD	Shield Array	LAS	Laser Guns Array
TAC	Tactical Radar Scanner	HULL	Hull Armor Array

8. MFD1

This Multi-Function Display is used by the craft's NID and TRS radar systems.

NAVIGATION INTERFACE DISPLAY (NID)

Activate the NID interface and cycle modes by pressing the **N** key or using the CMD/SYSTEMS/NID menu.

All navigation type and some ground targets are tracked here.

To select and cycle targets, use the **.** and **,** keys. The **[** and **]** keys are used to zoom the map.

When a target is selected, the target designator box or triangle (airborne targets) will appear in the HUD if it is within the craft's field of view. The target's range (km) and closure rate (m/s) are then displayed in the top left/right corners of the MFD. The range value is in meters when the target is less than 1km away.

MAP mode displays a satellite map of the area that you are flying over. The Yellow line extending from the center of the map to the edge of the display shows your direction of travel.

LOC mode displays your current location, game date/time as well as the the current weather condition and weather forecast.

TACTICAL RADAR SCANNER (TRS)

Activate the TRS interface and cycle modes by pressing the **T** key or using the CMD/SYSTEMS/TRS menu.

All strategic and tactical air and ground targets are tracked here. The type of target can be filtered using the Radar Target Mask in the CMD/SYSTEMS menu.
A selected target (blinking) inside the inner circle is ahead of you. In the outer circle it is behind you. And if in the very center of the inner circle it is directly in front of you. The max range of this radar is 100km.

Targets are color coded depending on type. They also only appear depending on the current radar target filter.

Blue	:	Neutral or Other
Cyan	:	Towed
Green	:	Friendly
Red	:	Enemy
White	:	Missile or Mine
Grey	:	Badly Damaged / Disabled

To select and cycle targets, use the **.** and **,** keys.

Once a target is selected, the target designator box will appear in the HUD if it is within the craft's field of view. The target's range (km) and closure rate (m/s) are also displayed in the top left/right corners of the MFD.

To switch to Single Target Tracking (STT) mode which filters out all targets except for the current one, press the **** key.

The NID and TRS display different classes of targets. So if you enable a filter and don't see the targets in the TRS, check the NID. e.g. You cannot view ground buildings in the TRS. You have to zoom the NID display so that the map is removed.

AIR	:	airborne crafts
GND	:	all ground units, excluding infantry
TRP	:	ground infantry (either on the ground or airborne using jetpacks)
EAD	:	Enemy Air Defenses (SAMs, SALs, fighter Launch Pads)
ALL	:	mode tracks all detected targets

9. MFD2

This Multi-Function Display is used by the craft's Visual Data Display (VDD) which provides video and data information about the currently selected NID or TRS target.

When a target is selected in the NID or TRS, a video image is displayed here. The target's name, race/caste, and type are displayed in the top. The shield and armor levels are displayed as vertical bars on the left and right sides of the image.
A set of three or four additional numbers are also displayed above the target image depending on its type. From left to right, these numbers represent the status of the target's reactor, engines, weapon systems, and launch bays. Some of this information does not apply to certain targets.

During combat, the integrity of the target can be monitored here as these values make up the target's overall integrity. As the target's systems are breached the indicators are adjusted to reflect these changes. Other info related to the tactical state of the target may be displayed at the bottom.

Engine	:	Affects speed and turn performance
Weapon	:	Below 25% integrity, the weapon systems will fail
Reactor	:	If the reactor is destroyed, the target will explode
Launch Bay	:	Below 25%, target will be unable to launch other craft

If you launch a missile which has a camera (shows what the missile is tracking), the image displayed by the camera will be displayed until the missile detonates.

For certain targets, a set of numbers appear above the target image. From left to right, these numbers represent the status of the target's reactor, engines, weapon systems, and launch bays. During combat, the integrity of the target can be monitored here as these values make up the target's overall integrity. As the target's systems are breached the indicators are adjusted to reflect these changes. Other info related to the tactical state of the target may be displayed at the bottom.

> Engine   :   Affects speed and turn performance
> Weapon   :   Below 25% integrity, the weapon systems will fail
> Reactor   :   If the reactor is destroyed, the target will explode
> Launch Bay   :   Below 25%, target will be unable to launch other craft

10. COMMS VIDEO

The image of a comms speaker is displayed here.

TACTICAL OPERATIONS

LOCATING & SELECTING TARGETS

You can select targets in the NID or TRS radar. A triangle (air) or square (ground) target icon is displayed when a target is selected. The color of this icon depends on the alliance of the target where Red is hostile, Green is friendly and Blue is a neutral or navigation target.

The target name is displayed if it is within the HUD field of view.

When a target is selected, a Yellow arrow will appear in the HUD if the target flies outside the HUD's field of view. Turn the craft toward the direction of this triangle in order to see the target once again.
A Target Lead Designator (TLD) which resembles a small dotted box will also appear near the target. This indicator attempts to predict where the current target will be in the next few seconds. This is where the target is calculated to be by the time the fired shot reaches it if you were to fire at the box. The TLD box will go from Green to Red if the target is predicted to exceed the firing range of your guns. When dog fighting, try to fire at this box or near it when it is Green to increase your chances of hitting the target. This is called leading the target.

Once committed to a guns engagement, the most important aspect is to not overshoot the target. You can use the match target speed (**M**) for this. Your speed will be adjusted to match the target's. You can still use thrust adjustments to temporarily increase/decrease your speed but if using a joystick throttle, it must be at the lowest setting for this to work effectively.

USING MISSILES

When a missile is armed, a Missile Tracking Designator (MTD) diamond appears and moves around HUD. If the target is a friendly or an invalid target, a flashing X symbol will be displayed in the target box. During the target search, the missile's acquisition state will show SCAN mode. Once the weapons computer verifies that the current target is valid, the diamond will be inside the target box and the radar state will change to TRACK.

Missiles have various capabilities and cannot lock on targets at less than 1km range. So check the target range in MFD1. When the target comes within the valid range of the currently armed missile, the acquisition state will change to LOCK and you will hear a beep as well as a target lock message from Mother prompting you to launch the missile.

If a launched missile is capable of hitting your craft, you will hear a rapid beeping. This is your cue to either jam or evade the missile or you will suffer either a direct or proximity hit.

USING GUNS

When the gun is fired, it must recharge fully before it can fire again. If your guns and/or weapon systems are damaged, the recharge rate will also be slower and the gun will be less effective until repaired. The maximum range of the gun takes into account the size of both your fighter and the target. So the closer you are to the target, the more powerful the gun's shots will be when they hit the target.

PRIORITIZING AND DESIGNATING TARGETS

Select a target and press **P** to add it to your priority list. Press **ALT+P** to display the list and cycle the targets. If not pressed for four seconds the list will disappear. The selected target becomes the current NID or TRS target but must be in the correct mode. e.g. if you select a ground target the radar must be in TRS/GND mode. All mission specific targets are automatically added to the priority list.

DOING REPAIRS AND REARMING YOUR CRAFT

You can dock with a starbase to repair or rearm. Select the target in the TRS or NID radar or press **CTRL+Y**. Fly within 1km distance, press **E**. You or your craft cannot be harmed by weapons fire when docked.

The status of each of the craft systems is color coded Green, Yellow or Red depending on the level of damage.

REPAIRS – Select this for instant repairs to all systems. In most cases, everything will be repaired immediately.

WEAPONS – Select the desired missile and the amount to add/remove. All crafts with missiles can only carry a total of ten. The missiles are listed depending on the type of craft. e.g. vehicles do not use the same missiles/rockets as fighters.

WING COMMAND

You can give orders to your wingmen or other support crafts ordered to escort you. You can select them either from the priority list or in TRS/AIR radar. After selecting the person, press **C** to open comms, then issue one of the following commands.

ESCORT/DEFEND ME	: come to my aid and engage my attacker
ATTACK AT WILL	: attack any detected air or ground targets
ATTACK ENEMY AIR DEFENSES	: attack enemy ground units such as SAM sites, AA guns etc
ATTACK ENEMY AIRCRAFTS	: attack enemy aircrafts

TACTICAL OPERATIONS MAP

The top map level shows color coded (Red and Green) rectangles which are mission zones containing bases. Also shown are markers for your team (White) and objectives (Yellow). In multiplayer, the clients currently on the server are displayed in the world map as color coded circle icons.

To zoom to an object or area on the map, left-click on the object, inside the mission zone rectangle, or anywhere on the map. You can also position the mouse over an area, then zoom in/out of that area using the keyboard without clicking on the map.

Numeric-5	:	Top Level Map View
Space-Bar	:	Toggle target boxes on/off
Home / End	:	Zoom in/out (small increments)
Page UP / Down	:	Zoom in/out (large increments)
Insert / Delete	:	Roll
Left / Right arrow	:	Yaw
Up / Down arrow	:	Pitch
Left-Click + Drag	:	Yaw up, down, left, right
Right-Click + Drag	:	Roll / Pitch up, down, left, right

SETTING WAYPOINTS

To set waypoints and actions, first click on the map to the normal level, go to the **WAYPOINT** menu, click **ADD**, then **SETPOS**. A White waypoint marker will appear. Use the keyboard zoom keys if needed, then left-click anywhere on the map to drop the waypoint marker. You can set a waypoint action if desired as reminder as to what action to perform.

You cannot set waypoints at the top level map. To create distant waypoints from that level, first place the waypoint in the normal level (left-click on the map), go to the top level (**Numeric-5**), left-click on the waypoint and move it to the desired position then left-click again to drop it.

To delete a waypoint, select it from the box and press the **DEL** button.

When you exit the map, the waypoint marker, number and range appear in the HUD. Use **-** and **+** to cycle through waypoints.

PLAYING ONLINE

The game supports up to 16 player deathmatch and eight play co-op on a LAN or over the Internet.

You can join a server using either the in-game server browser or via direct IP:PORT connect added to the game shortcut. Using direct IP connect bypasses the in-game server browser.

NOTE: You must add the game's AOA.EXE file to your firewall exception rules in order to be able to host or join games! The games uses UDP ports 2302 to 2304. You may need to forward these ports on your router. See www.portforwarding.com

JOINING A GAME

Select the server from the server browser and click **Join Game**. To help you search for specific server types, there are various filters which can be used to find certain server types.

After finding a server, make your character choices then click **Join Game** to connect. If the server requires a password (case sensitive), you will be prompted for it. You have three chances to get it right before you are rejected.

HOSTING A GAME

Click **Host Game** and set up the various server parameters. When done, press **Host Game** again to get the server running. The game supports late joining, so anyone can join the server even after the scenario has started.

After starting a server, you can use **Join Game** if you wish to play on the same server. This makes it a non-dedicated server. The server's setting will then be loaded from the GAME_SETUPMP.INI file located in the game folder.

HOST OPTIONS

Most of the server options are self-explanatory and all can be changed. To change an option, click on it and either type in the new option or make a selection from a menu list. e.g. to change MAX PLAYERS, click on it, backspace to clear, and enter the new value. Some advanced options are:

CYCLE SCENARIOS   : Server cycles all scenarios in sequence
ENABLE AI BOTS   : Server creates NPC bots when hostile aircrafts are detected
ENABLE EAD ASSETS   : Server enables the ability for SAMs, SALs, turrets and launch pads to engage hostile targets
TEAM AUTOBALANCE   : Server automatically balances both teams

MULTIPLAYER CHAT

Press **C**, type in the message and press **ENTER** to send it or **ESC** to cancel. To send via another channel, press **CTRL+ENTER**, then press one of the hotkeys (**A**, **T**, **P**, **M**) to select a channel and then press **ENTER** again to send the message. When you select a specific channel to send, all subsequent messages will be sent to that channel unless you change the channel again.

CHAT CHANNEL OPTIONS

(A)ll Players   send to all players on the server
(T)eam   send to all players in your team
(P)   send to a specific player. Select player from list using the mouse or **UP**/**DOWN** arrows
(M)   send to multiple players. Select players from list using the mouse or the **UP**/**DOWN** arrows. Then check the
                menu boxes for all recipients using **SPACEBAR** or the mouse. Click on **SEND** or press **ENTER** to send.

By default chat messages also go to the server host. To send a message only to the server host, remove all other recipients before sending the message.

Messages in the chat log window are color coded as follows:

Yellow: outgoing messages   White: incoming general messages
Green: messages from allies (your team)   Red: messages from hostiles
Cyan: messages from server

MULTIPLAYER GAME MODES

Deathmatch / Team Deathmatch

The objective is to kill the opposing players/team. The person or team with the most combat kills wins the round.
If the scenario ends before the number of kills is reached, then the person/team with the highest kills wins.

Co-Op Versus

The objective is to fend off hostile NPC units until the scenario ends. The person/team with the most combat kills wins the round.

Clients have to join within five minutes of the scenario starting. Clients do not re-spawn on death, but are taken to the observer camera where they can follow the match to completion if they want. The camera control keys work in the observer cam and clients can be cycled through using the standard target selection keys.

If all clients die before the scenario ends, the server resets the scenario.

SCORING

A scenario ends when either the timer runs out or the game conditions are met. The scores/stats are then displayed.

COMMANDLINE OPTIONS

+connect   : connect using IP:PORT format e.g. +connect 127.0.0.1:2302
-logchat   : Logs the chat session to a log file
+password   : password to pass to server e.g. +password 123456. If the password contains spaces, it must be enclosed in
                    quotes. Also, the underscore character cannot be the last character in the server password. NOTE: +password
                    should come immediately after the IP:PORT e.g. shortcut properties

"C:\Program Files\3000AD\Angle Of Attack\AOA.EXE" +connect 192.168.1.100:2302 +password "a password"

GAME OPTIONS

These options control various aspects of the game. To revert to original default values use the RESET option.

SOUNDFX
Audio.

MUSICFX
Music. You can play your own tracks by copying them to the MEDIA\AUDIO\MUSIC folder and the game will automatically play them. Due to MP3 licensing issues, only OGG files are supported.

HARDWARE AUDIO
CHANNELS
Determines the number of audio channels to use. For on-board audio on minimum spec machines, this should be 16 or 32. A value of 0 falls back to software processing of 3D audio on the CPU, resulting in a slight performance hit on minimum spec machines.

SOUNDFX VOLUME
Audio volume control.

MUSICFX VOLUME
Music volume control.

DISPLAY RESOLUTION
The higher the resolution, the slower the game will run; especially depending on the other graphics options.

TEXTURE FILTERING
Improves visual quality of object textures. High settings impact performance. To use this setting, ensure that you have your video card's own settings for this option set to "Application Preference".

TEXTURE QUALITY
Determines the quality of the texture rendering. High settings use more video memory. If you have a card with less than 512MB of memory, you need to keep this setting at low.

FULL SCENE ANTI-ALIAS
Improves visual quality of objects and helps reduce jaggies. High settings impact performance. To use this setting, ensure that you have your video card's own settings for this option set to "Application Preference". Turn OFF for an increase in game performance.

SHADOWS
Shadows on the terrain as well as object self-shadowing. High settings impact performance depending on the video card.

LIGHT SHAFTS
Light shafts (aka God rays) from Sun's rays on the terrain. High settings impact performance depending on the video card.

CLOUDS
3D volumetric cloud layer.

OBJECT REFLECTION	Object reflection on water.
TERRAIN REFLECTION	Terrain reflection on water.

GAME OBJECT SPECIFICATIONS

FIGHTER AIRCRAFTS

CLASS	NAME	CREW	SPEED (m/s)	SHIELD/ARMOR	RADAR RNG (km)	RATING
SUPER	RAVEN	01	750	800/800	150	Very Good
	VANDAL	01	710	600/1000	150	Very Good
	ZENSTAR	01	720	500/1000	150	Very Good
HEAVY	STARDRONE	01	650	500/400	100	Good
	CORSAIR	01	600	500/600	100	Good
	INTERCEPTOR MK1	01	650	400/400	100	Good
	INTERCEPTOR MK2	01	675	500/500	100	Good
MEDIUM	MANTIS	01	590	400/500	75	Average
	STARLANCE	01	575	450/550	75	Average
	AURORA	01	610	500/650	75	Average
LIGHT	ZODIAC	01	715	450/400	50	Poor
	STARMONK	01	725	450/450	50	Poor

GROUND THREAT UNITS

SAM = Surface To Air Missile unit	SAL = Surface To Air Laser unit

CLASS	NAME	SPEED (m/s)	SHIELD/ARMOR	RADAR RNG (km)	HIT DAMAGE
SAM (Mobile)	TSX1	35	0/500	25	500
	TSX2	35	0/500	35	750
	ACM	35	0/750	50	750
	ADV	35	0/1000	75	500
SAM (Fixed)	AX10	N/A	0/500	50	450
	AX21	N/A	0/500	65	650
	AX25	N/A	0/500	75	750

	GDN4	N/A	0/750	85	1000
SAL (Mobile)	MK1P	50	0/500	25	050 (x2)
	MK2P	50	0/750	35	100 (x2)
	XP10	50	0/1000	50	125 (x2)
SAL (Fixed)	MK3P	N/A	0/750	50	150
	MK1D	N/A	0/500	25	125 (x2)
	MK2D	N/A	0/500	35	075 (x4)

AIRCRAFT MISSILES

1.   Target must remain locked until the missile detonates. If lock lost, missile loses target and flies in dumb fire mode.
2.   After missile acquires lock and is launched, will continue to track the target until detonation. Can select another target after missile launch.
3.   Same as guidance type 1 but with a video camera mounted in the nose of the missile for more accurate tracking.

NAME	HIT DAMAGE	GUIDANCE TYPE	TYPE
CLUSTER	0500	2	Air-To-Air Missile
MAGELLAN	0750	2	
MARINER	0750	3	
WARRIOR	0850	3	
PILGRIM	1000	1	
SEEKER	1250	1	
SPYDER	0750	2	Air-To-Surface Missile
LYNX	0750	2	
MAVERICK	1000	3	
HARPOON	1250	3	
GAINER	1000	2	
HYPERDYNE	1500	3	
RADIX	0500	2	All Purpose Missile
RALIX	0750	2	

CREDITS

Designer, Producer, Project Manager, Lead Programmer, Chief Technology Officer, Core Development, AI

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ADDITIONAL PROGRAMMING SUPPORT	Martin Piper, ReplicaNet Nick Vining
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SCENARIO STORYBOARD, SCRIPTING, GAME MANUALS	Derek K. Smart, Ph.D.
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MIDDLEWARE TECHNOLOGIES

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