

# WARDOGS · Pilot Handbook

Fleet, controls, curves, flight ops, threats · data: EVA data-mine (9 Oct) + Dexerto wiki, Season 1

**Season 1 numbers.** Season 2 lands **Thu 15 Oct 2026**: progression wipe, cash turns into Gold Bars, and Bulkhead is changing weapon damage, recoil and suppression. Re-check after the patch.

## TL;DR

- **All four assists ON:** Stability, Auto Hover, Envelope Limits, Turn Coordination.
- **MKB:** Rotary Mouse Control on · Air Vehicle Multiplier **2.0** · mouse **50%** · axis isolation **0%** · arrow keys as secondary collective and yaw.
- **Sticks:** in-game sensitivity **never below 1.0**. Use **1.1** (yaw **1.05**), and do all smoothing with S-curves in VKBDevCfg.
- **Flying:** under **80 km/h** turn with yaw, over 80 bank to turn. Touch down under **50 km/h**. Drop pallets below **60 m**.
- **Pay:** each pallet delivered = **750 XP + \$2,500**. **Threat:** a CIWS kills a Havoc in about **6 s**.

## BUILDS

**Start**  
no  
unlock



**MH-6** · small transport, fast and agile take-offs and landings.  
\$6,250 350 km/h 6 seats 105 L

**Pilot 4**  
\$50k  
unlock



**AH-6M Miniguns** · small attack heli with 2× M134D miniguns.  
\$7,000 350 km/h 2 seats 105 L

**Pilot 10**  
\$35k  
unlock



**Z20 Lakota** · large transport and pallet slinger. Fastest in the fleet.  
\$7,400 445 km/h 13 seats 120 L

**Pilot 20**  
\$250k  
unlock



**AH-6R Rockets** · small attack heli with 2× B-13 rocket pods.  
\$12,500 350 km/h 2 seats 105 L

**Pilot 25**  
\$75k  
unlock



**Z20 Lakota Miniguns** · 11 passengers plus 2 door miniguns.  
\$8,000 445 km/h 13 seats 120 L

**Pilot 35**  
\$500k  
unlock



**Havoc** · heavily armored gunship with B-13 rockets and a 2A42 autocannon.  
\$18,000 400 km/h 2 seats 130 L

## PERSONAL LOADOUT

- **Flares** (\$750, 3 bursts) for every attack run.
- A **parachute**: Basic (\$100) or Sport (\$1,000, steerable, 9 kg) to bail out.
- **Wrench** for field repairs, a purple **Landing Zone** smoke (\$50) to mark pickups.
- Light carry weapon (MP5 or AK-74) and an IFAK for when you end up on foot.

# BALLISTICS & ZEROING

| WEAPON | ZERO  | 150 M            | 200 M            | 300 M              | 400 M              |
|--------|-------|------------------|------------------|--------------------|--------------------|
| AK-74  | 100 m | 5 cm<br>0.3 mil  | 13 cm<br>0.6 mil | 38 cm<br>1.3 mil   | 76 cm<br>1.9 mil   |
| MP5    | 100 m | 23 cm<br>1.5 mil | 61 cm<br>3.1 mil | 184 cm*<br>6.1 mil | 368 cm*<br>9.2 mil |

Holdover = how far **above** the target to aim, in cm and in mil (1 mil = 1 cm per 10 m, the hash marks on MRAD scopes). Lead = how far **ahead** to aim at a target running **5 m/s** (an assumed sprint speed, WARDOGS does not publish one). Calculated from muzzle velocity (g = 9.81, no drag inside the full-damage range). Check it in the firing range: patches change velocities.

## ZEROING RULES

1. **Sight in at 100 m** and aim center chest out to **200 m**. The round lands a hand-width low at 200 m, which is still chest.
2. **Between steps** (for example 160 m): keep the lower zero and aim at the **top of the head**. A low miss still hits neck or chest. Dialing up to 200 m and aiming low sends the round over the head.
3. **Long shots:** **PgUp** / **PgDn** dial the zero in **100 m** steps, then aim dead center. If you don't want to dial, use the holdover table.
4. **Past the full-damage range** the round loses speed as well as damage, so it drops **more** than the table says (marked \*).

## LEADING MOVING TARGETS

- Lead in mil stays the same at every range inside the full-damage range: **target speed ÷ bullet speed × 1000**. A 5 m/s runner needs about **6 mil** with an 830–900 m/s rifle and about **13 mil** with a 380–400 m/s SMG.
- Players stop about every **10 s** to scope in or check the map. Shoot then, and you don't need to lead at all.
- Running straight at you or away from you: no lead, aim for the drop only.

## AERIAL GUNS AND ROCKETS

- The wiki lists **no muzzle velocity** for the M134D, the B-13 rockets or the 2A42 autocannon, so there is no holdover table for them.
- Walk **tracers** onto the target. Rockets (122 mm HE) have a large splash: aim at the ground at their feet.
- Yaw S-curve 5 on sticks stops the minigun slingshotting past targets (see HOSAS).

KIT



Flares • \$750

3 bursts, anti-air countermeasure. Pop them when a lock-on launcher like the 9K333 Verba targets you.



Basic Parachute • \$100

2.5 kg, single use, can't steer.



Sport Parachute • \$1,000

9 kg, steerable • Wardog 35.



Wrench • \$150

Repairs every vehicle.



Landing Zone smoke • \$50

Purple smoke plus a map marker for pickups.



MP5 • \$1,500

Light carry weapon. Or an AK-74 (\$1,600).



IFAK • \$800

Full heal.

This kit weighs about **11 kg**, which puts you in **Light**.

WEIGHT CLASSES

| KIT WEIGHT  | CLASS       | MOVE SPEED | NOTES                          |
|-------------|-------------|------------|--------------------------------|
| under 10 kg | —           | full       |                                |
| 10–17 kg    | Light       | –5%        |                                |
| 17–27 kg    | Medium      | –13%       | slower ADS, less stamina regen |
| 27–40 kg    | Heavy       | –20%       | no tactical sprint             |
| 40 kg +     | Super Heavy | –20%       | no sprint, slowed              |

Source: WarDogs.News weight-class table. Other guides give –12% / –19%. An Adrenaline Pen drops you one class for a short time.

# AMMO



## 122 mm HE rocket · \$450

B-13 pods (AH-6R, Havoc). Stack of 3. Big splash.



## 30 mm HE cannon · \$500

Havoc 2A42. Stack of 200. Infantry and light vehicles.



## Flares · \$750

3 bursts per item.

# YOUR CARRY WEAPON

| CALIBER                 | AMMO       | NO ARMOUR          | L1           | L2           | L3           | L4            | UNLOCK    |
|-------------------------|------------|--------------------|--------------|--------------|--------------|---------------|-----------|
| <b>9x19 (SMGs, GGX)</b> | <b>FMJ</b> | 25.43<br>(4 shots) | 17.81<br>(6) | 15.27<br>(7) | 11.45<br>(9) | 8.91<br>(12)  | default   |
|                         | <b>HP</b>  | 50.84<br>(2 shots) | 7.56<br>(14) | 5.51<br>(19) | 2.41<br>(42) | 0.36<br>(278) | Wardog 6  |
|                         | <b>AP</b>  | 20.34<br>(5 shots) | 16.08<br>(7) | 14.65<br>(7) | 12.52<br>(8) | 11.09<br>(10) | Wardog 75 |
| <b>5.45 (AK-74)</b>     | <b>FMJ</b> | 28.62<br>(4 shots) | 20.03<br>(5) | 17.18<br>(6) | 12.89<br>(8) | 10.03<br>(10) | default   |
|                         | <b>HP</b>  | 57.21<br>(2 shots) | 8.51<br>(12) | 6.19<br>(17) | 2.72<br>(37) | 0.4<br>(250)  | Wardog 16 |
|                         | <b>AP</b>  | 22.9<br>(5 shots)  | 18.77<br>(6) | 17.4<br>(6)  | 15.35<br>(7) | 13.98<br>(8)  | Wardog 93 |

## WHICH AMMO

- **FMJ** is the default. Armor blocks **30 / 40 / 55 / 65%** of it at L1 / L2 / L3 / L4.
- **HP** does **2x** to flesh, but armor blocks **85–99%** of it. Only use it on players with no armor, or aim for arms and legs.
- **AP** does **20% less** to flesh, but armor only blocks **10–20%**. It wins against **L3–L4** armor and helmets.
- Headshots do about **2.1x**. L3 and L4 helmets also cover the neck. L4 armor also covers the upper arms and pelvis.
- HP and AP rounds unlock on the **Wardog** (career) track. The vendor sells the tracer versions.

FIELD RULES

| SPEED     | WHAT HAPPENS                    | DO                                                                       |
|-----------|---------------------------------|--------------------------------------------------------------------------|
| < 50 km/h | safe touchdown                  | Land only below this, or you break the skids or flip.                    |
| < 80 km/h | full yaw authority              | Rotate freely with <b>Q</b> / <b>E</b> or the stick twist.               |
| > 80 km/h | yaw authority drops off sharply | Turn by <b>banking</b> ( <b>A</b> / <b>D</b> ) with a little back-pitch. |
| ~300 km/h | best level cruise               | Keep the HUD pitch triangle <b>just above the lowest gauge line</b> .    |

LAKOTA PALLETS

- **No J-hooks or hard airbrakes** while you carry a pallet. The weight shifts your center of gravity and you get a tail-spin you can't recover from.
- Drop below **60 m AGL** while in a slow forward hover.
- Keep Envelope Limits **ON**.

PRE-FLIGHT CHECKLIST

- All 4 assists **ON**
- Stick sensitivities  $\geq 1.0$  (1.1 / 1.05)
- Gremlin **activated** + free-look script running
- Flares bound and tested
- Proximity chat on a button to talk to passengers

PAY PER TRIP

| ACTION                         | XP         | CASH           |
|--------------------------------|------------|----------------|
| Passenger delivered            | 50         | \$150          |
| ...and they survive            | +100       | +\$500         |
| Round trip (troops only)       | 300        | \$750          |
| <b>Supply pallet delivered</b> | <b>750</b> | <b>\$2,500</b> |

EVA. Same delivery bonus as Driver:  $\times 1.1$  after 10 players, up to  $\times 3$  after 75.

WHAT KILLS YOU

| VEHICLE                                                                                               | BULLETS | WORST THREATS (EXTRA DAMAGE)                                                                  |
|-------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------|
|  <b>Havoc</b>       | -95%    | drone +450% · rocket splash +400% · AT mine +200% · <b>20 mm CIWS and 35 mm Gepard +87.5%</b> |
|  <b>Lakota</b>      | -95%    | drone +450% · rocket splash +200% · 120 mm +150%                                              |
|  <b>MH-6 / AH-6</b> | -92.5%  | drone +500% · rocket splash +400% · AT mine +200% · 120 mm +100%                              |

Wiki damage-resistance tables. Since the 2 Oct hotfix a Vanguard CIWS kills a Havoc in about **6 s** again (it was 12). Stay out of its sight.

# MOUSE & KEYBOARD

## IN-GAME SETTINGS

|                              |                                                                                               |
|------------------------------|-----------------------------------------------------------------------------------------------|
| Rotary Vehicle Mouse Control | <b>ON.</b> Use Yaw & Pitch to aim like a rifle, or Roll & Pitch if you come from Battlefield. |
| Heli mouse pitch / yaw sens. | <b>50%</b>                                                                                    |
| Heli mouse axis isolation    | <b>0%</b>                                                                                     |
| Air Vehicle Multiplier       | <b>2.0</b> (full-strength key input)                                                          |

## FLIGHT ASSISTS: ALL ON

|                          |                                                                       |
|--------------------------|-----------------------------------------------------------------------|
| <b>Stability Assist</b>  | no spiral or tumble when you tap keys                                 |
| <b>Auto Hover</b>        | no crash if you let go for a moment                                   |
| <b>Envelope Limits</b>   | stops nose-dives you can't recover from while carrying Lakota pallets |
| <b>Turn Coordination</b> | smooth high-speed banking                                             |

## KEYBINDS: PRIMARY + SECONDARY

| FUNCTION               | PRIMARY      | SECONDARY | WHY                                              |
|------------------------|--------------|-----------|--------------------------------------------------|
| <b>Collective up</b>   | <b>Space</b> | <b>↑</b>  | Thumb control, so <b>W/S</b> stay free for pitch |
| <b>Collective down</b> | <b>C</b>     | <b>↓</b>  | Same key as crouch, so it feels natural          |
| <b>Yaw left</b>        | <b>Q</b>     | <b>←</b>  | Two-handed fast rotation                         |
| <b>Yaw right</b>       | <b>E</b>     | <b>→</b>  | Two-handed fast rotation                         |
| <b>Roll L / R</b>      | <b>A / D</b> | —         | Lateral tilt                                     |
| <b>Free look</b>       | <b>L-Alt</b> | —         | Hold to check the cockpit or landing zone        |

## 4-BUTTON INSTANT AIRBRAKE (FROM 250+ KM/H)

- 1

Level out: line the horizon up with the center display.
- 2

Hold **S** + **D** + **↓** + **→** together. Mirrored version: **A** + **S** + **←** + **↓**.
- 3

You get a flat flick-stop to **< 50 km/h** in seconds, with no altitude loss and no nose-dive. Safer than a J-hook.

# SINGLE STICK / HOTAS

**Rule #1:** in-game vehicle sensitivity must **never go below 1.0**. WARDOGS doesn't smooth the input. It **clamps max deflection**, so at 0.5 collective you can never reach full climb or full speed. Do all smoothing in device software.

| IN-GAME SENSITIVITIES |       |                                 |
|-----------------------|-------|---------------------------------|
| AXIS                  | VALUE | NOTE                            |
| Pitch                 | 1.1   |                                 |
| Roll                  | 1.1   |                                 |
| Collective            | 1.1   |                                 |
| Yaw                   | 1.05  | twitchy · dead zone <b>0.02</b> |

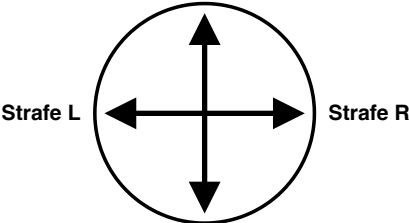
| BUTTON MAP              |                              |
|-------------------------|------------------------------|
| Main trigger            | Fire                         |
| Thumb red button        | Reload                       |
| Hat pull back           | Flares / countermeasures     |
| Rocker R / L            | 1st/3rd person / ping target |
| Throttle side button    | Proximity / squad voice      |
| Throttle rocker / lever | Deploy supply crate          |

- EXTERNAL TOOLS
- **Joystick Gremlin** maps stick switches to keys the game won't bind (map zoom **I I**, proximity chat, squad comms). Details on the [Gremlin](#) page.
  - **Free-look script** turns a hat switch into smooth mouse look while you hold **L-Alt**. The game has no native head-tracking for sticks.
  - **Curves**: use S-response curves in device software (VKBDevCfg). See the [HOSAS](#) page.

# HOSAS · 2× VKB GLADIATOR NXT EVO

**LEFT · Omni-Throttle (OTA)**  
translation · tilted

**Push = collective DOWN**

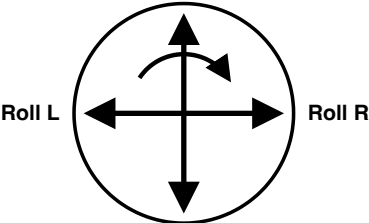


**Pull = collective UP (climb)**

Twist: spare / secondary yaw

**RIGHT · Standard**  
rotation · upright

**Push = nose DOWN (forward)**



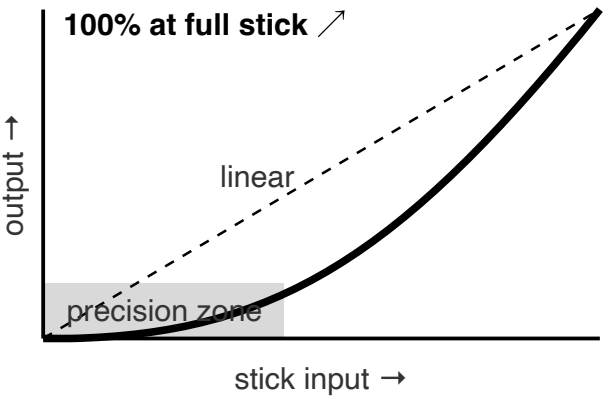
**Pull = nose UP (flare)**

Twist: YAW (rudder)

## VKBDEVCFG CURVES

| AXIS                          | DEAD ZONE | CURVE                                                                                            |
|-------------------------------|-----------|--------------------------------------------------------------------------------------------------|
| <b>Yaw</b> (R twist)          | 2–3%      | <b>S-curve 5</b> (range 4–6). Top priority: stops the minigun from slingshotting past targets.   |
| <b>Pitch / Roll</b> (R stick) | 2–3%      | <b>S-curve 3</b> (range 2–4). Smooth for landings and pallet drops, full authority at the stops. |
| <b>Collective</b> (L Y)       | —         | <b>Linear (0)</b> for predictable altitude                                                       |
| <b>Strafe</b> (L X)           | 2–3%      | mild S-curve                                                                                     |

## WHAT AN S-CURVE DOES



**Hardware:** on the left OTA stick, **remove the Y-axis centering spring** or tighten the dry clutch. The lever then stays where you leave it, like a real collective.

**Your notes disagreed** on the S-curve values and on collective direction. This page uses yaw 5, pitch/roll 3, and pull = climb. If climb feels backwards, invert the axis in VKBDevCfg.

# JOYSTICK GREMLIN + FREE-LOOK

## WHY

WARDOGS reads stick axes, but it can't bind some features to stick buttons. Gremlin turns a button press into a normal key press. It doesn't inject code, read memory, or run macros, so it's **safe to use**.

## REMAPS

|                           |                                              |
|---------------------------|----------------------------------------------|
| Throttle side button      | <b>P</b> proximity chat (talk to passengers) |
| Throttle rocker up / down | <b>I</b> / <b>J</b> mini-map zoom            |
| Spare throttle switch     | squad voice key                              |
| Left thumb button         | <b>L-Alt</b> free-look                       |

## SETUP

- 1 **Install** Joystick Gremlin, plus vJoy if your setup needs it.
- 2 **Find the button:** press it on the stick and Gremlin highlights that input.
- 3 **Remap:** select the input, set the action to **Remap**, then press the target key from the table above.
- 4 **Free-look script:** download IceManIsaac's Python script (from his GitHub or HOTAS community links). Tune the X/Y magnitude in its file, then start it.
- 5 **Activate** Gremlin with the green button **before** you launch WARDOGS.
- 6 **Test** in the firing range in an MH-6: hold **L-Alt** with your left thumb and move the hat switch with your right.

Why the script: Gremlin's own hat-to-mouse mapping moves in fixed steps and jumps on diagonals. The script moves the mouse along a smooth sine curve instead.

# PROGRESSION LADDER

| LEVEL | UNLOCK                                                                                                | COST      | WHY               |
|-------|-------------------------------------------------------------------------------------------------------|-----------|-------------------|
| 2     | Small Armored Crate                                                                                   | \$10,000  | air-drop supplies |
| 4     |  AH-6M Miniguns      | \$50,000  | first gunship     |
| 10    |  Z20 Lakota          | \$35,000  | 13 seats, pallets |
| 15    | Large Armored Crate                                                                                   | \$25,000  | bigger air drops  |
| 20    |  AH-6R Rockets       | \$250,000 | rocket pods       |
| 25    |  Z20 Lakota Miniguns | \$75,000  | door guns         |
| 35    |  Havoc               | \$500,000 | armored gunship   |

Unlocked by other roles: MH-6 needs no unlock

Sources (checked 12 Oct 2026)

- EVA Evo's data-mined WARDOGS spreadsheet (updated 9 Oct 2026): damage, armor, shots and time to kill, attachment stats, XP and cash per action.
- [Dexterto WARDOGS wiki](#) (Season 1): prices, weights, unlocks, zero ranges, damage falloff, pictures. Fleet stats and damage resistances.
- Your NotebookLM notes built from top-player YouTube guides: tactics and techniques. Controls, curves and flight technique come from these notes.
- [Bulkhead patch notes](#) (Season 1 launch 10 Sep, hotfixes to 2 Oct 2026, Season 2 date).
- Holdover and lead tables are calculated from muzzle velocity ( $g = 9.81$ , no drag inside the full-damage range, target at 5 m/s).