

Harpoon 2 / Harpoon 3 FAQ

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General

Which version of the simulator should I get? Harpoon II or Harpoon 3? What does Harpoon 3 offer except from Windows-compatibility?

Harpoon 3 is the latest, most realistic, accurate and detailed version in the Harpoon series of air/naval warfare simulators. Detailed information and screen shots on the various versions of computer Harpoon can be found on the [What is Harpoon page](#).

Harpoon 3 offers much more than simply full Windows compatibility. Performance increases of up to 500%-1000% have been recorded. Scenarios that would either crawl (too much stuff happening on screen) or crash altogether (memory limits) now run like a breeze. In addition, a mile-long list of bugs have been fixed and more are fixed with each successive exe release. New versions have also added new features such as a detailed after-action log, fully-working nuclear weapons, true thermal layer (which the AI subs use deviously), fully-working terrain-following, custom GIS overlays and many others. Harpoon 3 is a continuous work in progress and we would not be surprised to see features in it that we've not dared imagine until now.

Where can I obtain a copy of Harpoon 3?

To purchase the full version of Harpoon 3 go to [this page](#).

Is there a demo for Harpoon 3?

The Harpoon 3 demo for both Windows (Windows 95 / 98 / ME, NT 4.0, Windows 2000, Windows XP) and Mac (OS and OSX) can be downloaded [here](#).

Okay, I ordered the direct-download version. Now what?

If you are using the Windows version, check this page: <http://www.harpoon3.com/thankyouwin.html>. It has detailed instructions on what you should do to ensure a smooth installation and registration. Mac users should have a look here: <http://www.harpoon3.com/thankyou.html>

I ordered the CD version. Anything I can do while waiting for the CD?

The instructions on the page linked above apply to you too. The huge zip file included on the CD (which should have the name "Install Harpoon 3" or similar) is identical to the direct-download file. Follow the same instructions and you should be fine.

What's the deal with this weird lok-kee system?

It's actually quite simple, if you follow some simple steps carefully. Take a look at this page for a detailed explanation of the procedure and how to do it right: http://www.harpoon3.com/lok_and_kee.html

What are the system requirements for Harpoon 3?

The simulator will work on Windows 95/98/ME, NT 4.0, Windows 2000 and Windows XP. Minimum requirements:

- 486DX2, 50 MHz processor.
- 190 MB hard drive space.
- Minimum RAM is whatever your version of Windows requires.
- DirectX version 3.
- Video card capable of running Windows at 800 x 600 x 256 colors.

Is there a Mac version?

Yes. The simulator will run on any PowerMac running System 7.1 or later, including iMacs, G3s, G4s, and also older PowerMacs and PowerPC clones. Minimum requirements:

- 16 MB of Physical RAM
- QuickTime (requires 3.0 or later)
- 100MB of hard drive space

What is the performance like?

The faster your computer is, the better. For PC we recommend any Intel or AMD processor running at 300MHz or faster, and 64MB of RAM. Playing larger and more complicated scenarios Harpoon 3 will require a faster CPU and more memory to keep up. Most scenarios play very well on a 1GHz Thunderbird, and run like a breeze on AMD XP1600+. If you want to run at higher resolutions up to 1200x1024 it will require a better video card. For Mac, Harpoon 3 will run fairly well on a PPC 601, runs great on a G3, and screams on a G4.

Are there any known incompatibilities?

None in Windows. Harpoon3 and Mac PowerWindows don't work together. "G3/G4 Profiler" doesn't get along with Harpoon3 either, and should be disabled before playing.

I am running a scenario from the CD, together with the DB-2000, and there are problems/crashes. Why?

IMPORTANT!!! The DB2000 will work ONLY with scenarios downloaded from the HarpoonHQ. It will NOT work with any scenarios not written for the DB2000. The changes and additions in the new database will cause conflicts and crashes if you try to use it with scenarios found on the CD or elsewhere on the web (Harpooner Scenario Warehouse, Dr. Who's Harpoon page etc). Also, every time we release a major database revision we regularly update the scenarios to reflect the new information. So when you download a new scenario please take the time to download the most recent DB version as well.

Is there a printed manual for Harpoon 3 included with the CD?

No. But the manuals can be downloaded in printer-friendly Acrobat Reader and MS-Word formats on the HarpoonHQ, in the Utilities section.

Is there a scenario editor manual for Harpoon 3?

Yes, see above.

Which battlesets are included on the Harpoon 3 CD?

The following battlesets are included:

- Tutorial
- Global Conflicts 1
- Global Conflicts 2
- Global Conflicts 3
- WestPac
- ColdWar
- Regional Conflicts 1
- Regional Conflicts 2

DB2000-related

So, what is this DB2000 I've been hearing about?

Quite simply, the DB2000 is the most accurate, detailed and realistic dataset available for any version of computer Harpoon at the moment. In short, it rocks ☺. Describing the features of the dataset would easily eat up the entire space of this magazine. A summary of the database mechanics and features is available here: <http://www.harpoonhq.com/harpoon2/db2000/features.html>

Where do I find scenarios for this database? The original CD database may not be hyper-accurate, but gives me plenty of scenarios to play with!

All the H2/3 scenarios available for download at the HHQ are DB2000-certified. Your choice of DB2000-certified scenarios is as great and varied as of those on the CD: we have updated about 50 of the original (CD) scenarios to work with the DB2000 (and also fixed the AI and corrected the OOB), and also created another 100 normal-sized ones from scratch. Then throw-in Klaus' 30 monster-sized scenarios (*guaranteed to give you a migraine*☺) and you begin to see that the DB2000 is well-stocked with the scenarios to boot. Furthermore, the stock CD scenarios are finite and numbered (*nobody is developing scenarios for the original H2AE database anymore – and good riddance!*), while the DB2000-compatible scenarios keep on coming ☺. You can download them from the [Harpoon II and Harpoon 3 scenario download page](#).

How can I use the DB2000 database and scenarios in Harpoon 3?

Details on how to set up the database and load new scenarios can be found [here](#).

What about DB2000 database & scenario inconsistencies?

All scenarios posted on the [Harpoon II and Harpoon 3 scenario download page](#) at any given time are 100% certified for the latest version of the DB2000 database. The HHQ webmasters keep track of all database changes and update the scenarios when needed. So you do not have to worry about database-scenario inconsistencies as long as you always make sure to use the LATEST database and scenario from the web. The DB2000 database and scenarios are constantly updated and improved, and for example the latest database may not necessarily work with a scenario downloaded two months ago, and vice versa.

When are you guys going to finish converting the rest of the older scenarios from the Harpoon3 CD to DB2000? Is it not just a matter of re-loading them into the new database?

Not all scenarios are being converted; typically the first converted are the "classic" ones from each of the original battlesets. There are many scenarios that one just revisits "one more time" again and again for some reason or another (*the Cold War-themed Atlantic-convoy rounds or CVBG-vs-Kola slugfests being a good example*), and these naturally have priority in being made DB2000-compatible.

Rebuilding a scenario that was made with a different database is not all that simple. First of all, we have to check for unit-reference inconsistencies. For example an US Navy Aegis cruiser in the old database may be a Russian Sovremenny destroyer in the DB2000, and the F/A-18 Hornets may end up being armed with a simple MiG-23 ground-attack loadout instead of the intended AMRAAM air-to-air loadout. Next, we have to make sure that every single ship, sub and land facility has its magazine rebuilt, we have to make sure the weapon/sensor changes have been "understood" by the scenario, etc.etc.etc. And that's just the "technical integrity" part. After that, we have to make sure that the changes haven't unbalanced the scenario. If we have given side Blue a new super-weapon, for instance, we somehow have to beef-up Red side and/or rewrite the scenario orders to compensate. And of course we have to keep a "realism check" at hand (don't want to stuff 200 fighters in a CVN accidentally...). So yeah, it's a long and unthankful process.

But our long-term goal is to rebuild the majority of the 110 scenarios with the DB2000. We have converted 50 so far, you can download them on the [Harpoon II and Harpoon 3 scenario download page](#).

Harpoon 3 won't work with the latest DB2000 version. What is wrong?

IMPORTANT!!! The DB2000 will work ONLY with scenarios downloaded from the HarpoonHQ. It will NOT work with any scenarios not written for the DB2000. The changes and additions in the new database will cause conflicts and crashes if you try to use it with scenarios found on the CD or elsewhere on the web (Harpooner Scenario Warehouse, Dr. Who's Harpoon page etc). Also, every time we release a major database revision we regularly update the scenarios to reflect the new information. So when you download a new scenario please take the time to download the most recent DB version as well.

There is an error in the database or in a scenario. What should I do?

Please e-mail us right away. On a normal day the problem will be fixed within 24 hours. Please do not make the correction yourself and send the updated scenario to us. The DB2000 database and scenarios are constantly updated, and the new files you send to us will most likely be outdated by the time they arrive in our mailbox. Thanks.

A platform is missing from the database. How can I add it?

There are two ways.

1. Send us all the info you got on the platform and we will add it as quickly as possible
2. You make the platform yourself in Jon Reimer's Harpoon 3 Database Builder, export it to a HCF (Harpoon Component File) and e-mail it to us. We'd appreciate if you mail us in advance about any platforms you are planning to make, as they may already exist in the database under a different name. To keep the database as small as possible, we only add platforms that you are planning to use in a new scenario.

Why does the database appear to have multiple entries for the same platform?

The DB2000 has multiple database entries for the same platform to represent all operators, main versions, subversions and weapon configurations over time. If you access the dataset through the scenario editor or one of the DB editors, you will see that most units have a '|' letter at the end of their name followed by a comment or note which describes each entry. The comment holds information about the service entry year, operator/country, weapon upgrades, and so on. Harpoon 3 has been programmed to ignore everything written after the '|' letter, and this extra information will only be displayed in the database editor and scenario editor (for the benefit of the scenario/database designers), and not during actual gameplay. For example, the unit named "*F-14D Tomcat|1998/LANTIRN*" will only appear as "*F-14D Tomcat*" during gameplay. The "*CG 52 Bunker Hill|2000/SM-2IIIB*" will appear as "*CG 52 Bunker Hill*". The "invisible" comment suggests this is the year 2000 version of the cruiser and uses the SM-2 Block IIIB missile as it's primary weapon.

Why are some variables like waypoints and terminal trajectory in the database never set?

The released version of Harpoon II (which is Harpoon 3's predecessor) is not even a shadow of what it was originally planned to be. The simulator was supposed to have an even more advanced ECM/ESM + radar simulation, waypoints and terminal trajectory for weapons etc etc etc. But the original Harpoon II developers ran out of time and money and all these features were eventually left out. And since neither Harpoon II nor Harpoon 3 currently supports these fields, we have never bothered to fill them in. However, Jesse's Harpoon 3 project is aimed at implementing most if not all of these features eventually, and in that case the database will definitely support them.

Why no TASM (Tomahawk Anti-Ship Missile) after 1991?

The nuclear (TLAM-N) and anti-ship (TASM) variants of the Tomahawk were withdrawn in the early 1990s as the Cold War came to an end. TASM was withdrawn because there was no longer any chance of blue-water engagements against a navy with large, high-value targets like the Soviets, and many of the missiles have been converted to land attack. The TLAM-N was withdrawn as per a 1991 agreement with Russia to not deploy nuclear weapons at sea (other than strategic ballistic missiles).

Why are later S-3 Viking variants not carrying ASW weapons?

The Viking's ASW role was removed in 1999. US aircraft carriers now deploy with four to six S-3 Vikings; some for the tanker role, and two aircraft dedicated to ASuW armed with iron bombs, Harpoons and Mavericks. The ASW mission is undertaken by Seahawks and Orions.

How does Stealth work with F-117A, B-2A etc?

Stealth and low-observable aircraft and ships in the database have smaller radar, visual and IR signatures than other units. The F-117 is not all that difficult to detect with AEGIS and other high-end air-search radar systems, and detection ranges approaching 40nm is not uncommon. So you need to use active ECM if you want them to live through an attack on a heavily defended target. The F-22 has a similar RCS (Radar Cross Section) in real life. But in the DB2000 we've also taken into account the fact that the F-22 will use Active Stealth (similar to Rafale's Spectra active-cancellation system) in addition to passive stealth, and the end result is a significantly smaller signature than that of the F-117. Finally, there is the B-2 bomber which, thanks to its "cost-not-a-factor" stealth treatment, is extremely difficult to detect even with the use of advanced sensors.

What is the best way to employ the ITALD, TALD loadouts?

The TALD and ITALD are just extra targets for SAM and radar sites, so just fire them along with other ASMs or ahead of your strike aircraft. The hotkey to fire air-launched decoys is Ctrl + F1 (the same key is also used for BOL-attacks). The AI cannot use decoys.

How can I deploy SEALs from SSNs?

All SpecOps submarines in the DB2000 carry SEAL teams. The SEALs work the same way bombs do, and are deployed using the Attack menu. A limitation with this implementation is that they cannot be retrieved afterwards.

Why do many guns have such a low PoK against aerial targets?

Anti-ship cruise missiles are extremely difficult to shoot down. And even if destroyed in mid-air, the missile may still cause serious damage if the warhead detonates at ranges closer than 500m from the target, or if the ship is hit by debris from a disabled missile. In the Falklands War, only one of six Exocet missiles fired at British ships was shot down, and this kill is not even 100% certain. PoK (Probability of Kill) in Harpoon 3 is calculated for a burst of fire - this can be either just one round (for larger guns) or up to several hundred (for Mk15, AK-630 etc) - and the chances of hitting a target within a given amount of time. We are also taking into account limitations in the Harpoon 3 game engine. There is no separate range figure against aerial targets and we're forced to use the max anti-surface range. This gives the defender a 1/3 to 1/2 longer range than in real life, and we have reduced the PoK to compensate for this.

Why do certain aircraft only have two speed settings?

The reason is that when an aircraft like the F-22, Tu-22M, MiG-25 and MiG-31 has varying cruise speed (i.e. a high-Mach cruise speed that increases with altitude), the AI has difficulties determining bingo fuel levels, and will run the aircraft out of fuel if using full and reheat throttle settings. Therefore, you can not use other speed settings than cruise and loiter.

Sonar range circles are very small compared with the original database, in some cases they are only 1nm in diameter. Why?

The DB2000 database has a completely redesigned sonar model, details can be found [here](#). In addition, Harpoon 3 uses a pretty weird formula for calculating the sonar range circles. So the circles in the simulator are not actual sonar ranges, and it therefore recommended to play with sonar range circles OFF.

How do I kill the fast MiG-25 and MiG-31 interceptors?

When you decide to go after a group of MiG-25 or MiG-31 interceptors, it is important that your fighters fly as high and as fast as possible. Due to the way Harpoon 3 calculates firing parameters and no-escape zones, the AIM-54A Phoenix has for example a launch range of only about 40nm against these speeding targets. If your own fighters are traveling at Mach 1.5, the enemy air-to-air missiles will have a reduced effective range too, about 25nm for the AA-6 and 40nm for the AA-9. If your fighters are flying at lower speeds you give the enemy a big advantage as he can launch his missiles at longer ranges, in most cases before you can.

How can I take a closer look at the DB2000 database?

To view the database you should use Jon Reimer's Harpoon 2 and Harpoon 3 Database Builder, which can be downloaded [here](#). This is a fast and easy-to-use database editor that has lots of really great built-in aids and features. You need MS Access to open the editor. Access is a program included in the Microsoft Office Suite (which includes Word, Excel, Access, Outlook, PowerPoint, Publisher, and FrontPage). The database editor that comes with Harpoon 3 is based on that for Harpoon II Admirals Edition, and is FULL of serious bugs, errors and shortcomings, and we do not recommend you to use this tool.

Playing tips & misc. support

For a mile-long list of hints & tips to get the most out of Harpoon 2 and Harpoon 3, visit this page:

<http://www.harpoonhq.com/harpoon2/db2000/faq.html> .

The Harpooner's Point forum (<http://www.harpoonhq.com/phpBB2/>) is the single best place for answering any questions you might have on playing H2/3. The Waypoint staff as well as the rest of the HarpoonHQ webmasters, along with a community of myriads, are ready to answer any sort of question and provide all the support you may need. "No question is stupid, no call for help is lame" is our motto.