

Command at Sea (CAS) Form Instructions v1.0 17DEC2020

General

The CAS editable .pdf forms are designed to aid you in organizing the information needed to play *Command at Sea* without having to constantly refer back to the Annexes and rulebooks during play. While they take some time to set up, once they are completed, they can be saved and reused as needed.

Local Use

Many browsers do not allow you to fill out editable .pdfs directly. Instead, you must download the form to your own computer and modify it there. Usually there is a “download” option on the browser .pdf display, or you can right-click on the link and use the “save as” or “save link as”. Once you have saved the form locally, the ubiquitous Adobe Acrobat Reader should work fine. Also, make sure that your security software does not disable scripts, or the forms will not work correctly.

Prefilled Examples

To demonstrate the use of the forms, we have filled them with examples from the various Command at Sea Annexes. Just overwrite this information with what you need for your games.

Calculations

Most of the fields on the form are “information only.” However, entering data in some fields will cause other information to be calculated and filled according to the *Command at Sea* rules, so you don’t need to remember all of the details. For example, if you enter the size class and speed of a ship and check the boxes for any special conditions apply, the form will then calculate the turn and acceleration information, based on the table on page 3-2 of the rules. The calculations done on each form are described in the sections on that form.

Using Tab to traverse the form - committing the changes

While entering information that is used in calculations, it will occasionally seem that what you enter does not have an immediate effect. Sometimes this happens because the form does not register the changed data (called “committing the change”). It will not invoke any associated code unless you move to another field after you have finished entering the information (called “changing focus”). The easiest way to ensure that you change focus and your information is “committed” to use the “tab” key to move to the next field. Selecting a different field with the mouse will also work.

Remarks

It is almost impossible to anticipate every possible piece of relevant information or special condition, so remarks fields are provided. If something doesn’t fit neatly into the categories we provided, put it into the remarks field.

CAS Form 1 (Surface)

This form assists allows you to set up the information used for surface ships. The information comes primarily from Annex A of the supplements. There is a separate form for submarines.

Calculations

Damage Points + Speed ->Damage Levels + Speed Loss

Size Class -> Size Description

Size Class + Speed + Maneuvering Checkboxes ->Turn and Acceleration as per page 3-2 of the rules

Form Description and Comments

The form is set up with the data for the USS O'Bannon (DD-450), one of the more famous Fletcher Class destroyers of WW2. Data for the Fletchers is found on p. A-17 of the American Fleets Data Annex

The first two lines are relatively self explanatory and come from the top of the Annex A data. Note that choosing size C will set the size name to small. It also sets the turn radius and acceleration. (Note that the Fletcher is a special case - more on that later).

Enter the damage points and speed - Only the max damage points and max speed need to be entered, the form will calculate the different levels.

Look at the box containing the turn and acceleration data. Setting the ship size will change these values to those found on p.3-2 of the CAS rules. As merchants are generally less agile than warships, there is a checkbox for "Merchant" which will use merchant ship values. As it is a warship, this is left unchecked for the Fletcher. Usually, using the calculated turn and acceleration data will suffice. However, examining the Data Annex p. A-17 for the Fletcher, we see the note "Due to single rudder, turns as Size A warship". If we change the size to "A", it will recalculate both the acceleration and turning data. However, we want the Fletcher to turn like a class A, but accelerate like a class C. The form will allow you to do this by unchecking the "Do calculations" checkbox. This will open the turn/acceleration fields for direct editing. The easiest way to implement this note is to set the size to C and record the acceleration data (12/6/15). Then set the size to A, which will set all the values to the larger ship. Then uncheck the "Do calculations" box, reset the size to C, and enter in the 12, 6, and 15 values directly into the acceleration boxes.

The rest of the form comes from the Annex A and the associated annexes for the weapons. Make liberal used of the Remarks field to handle unusual situations, such as the 3 speed Mk15 torpedo.

CAS Form 1 (Submarine)

This form assists allows you to set up the information used for submarines. The information comes primarily from Annex A of the supplements. There is a separate form for surface ships. Submarines have submerged maneuvering data and fewer guns and alternative weapons.

Calculations

Damage Points + Speed ->Damage Levels + Speed Loss

Size Class -> Size Description

Size Class + Speed + Maneuvering Checkboxes ->Turn and Acceleration as per page 3-2 of the rules

Form Description and Comments

The form is set up with the data for the Wahoo, one of the more famous Gato class submarines of WW2. Data for the Gato class is found on p. A-28 of the American Fleets Data Annex.

The first two lines are relatively self explanatory and come from the top of the Annex A data. Note that choosing size C will set the size name to small. It also sets the turn radius and acceleration.

Enter the damage points and speed - Only the max damage points and max speed need to be entered, the form will calculate the different levels. Note that submarines have two speeds, one for the surface and one when they are submerged.

There are two checkboxes in the maneuvering data (initially set off) that can effect maneuvering capabilities. Japanese submarines do not manuever as well as others and late war submarines accelerate more rapidly. If these apply, check these boxes on.

The rest of the form comes from the Annex A and the associated annexes for the weapons. Make liberal used of the Remarks field to handle unusual situations, such as the 2 speed Mk14 torpedo. Note that while the battery rating is modifiableentered, the Battery Remaining field is for manual use during the game.

Air Mission Form (CAS Form 2)

This form assists you in planning your CAS air missions, by setting up the information for up to 2 aircraft. The information comes primarily from Annex B of the air supplements and annexes. Note that this called an Air "Mission" form rather than an Air "Data" form because the configuration of the external stores and ordnance of an aircraft can change based on what its role is for that mission, Examples include Strike or Combat Air Patrol.

Calculations

Ceiling + Engine Type -> Available Throttle Speed Settings. You will only be able to enter throttle speeds for altitudes that the aircraft can reach.

Weight(s) -> Load. The Load of the aircraft is calculated by adding up the weight of additional fuel, torpedoes and ordnance. As you add more ordnance, the load will go up and the Load % will be increased. Note that for most weapons, the weight is the number of weapons x the weight of a single weapon. No edits are done to see if the total weight exceeds the maximum load, so be sure to check that your plane can get off the ground. Weapons and additional fuel are also considered to be "internal" (in the bomb bays) or "external" (hung on the wings and fuselage). External loads decrease performance according to sections 4.11.1->4.11.3 of the CAS rules

Maximum Load + Load -> Load %-> Mod Range. See section 4.11.3 of the rules for Range and speed effects of loads

Internal Crs (Cruise) Rng + Additional Fuel Range -> Mod Range. The modified range is first calculated by adding the internal fuel and additional fuel (from drop tanks, conformal packs, etc.) and then modified by load effects. Range is measured in nautical miles (nmi)

Form Description and Comments

With the exception of the fields used in calculations most of the data is free form entry, the best way to see how the form works is to follow through the examples that we use.

The example form contains two components of a naval strike, a TBF Avenger carrying a torpedo and a SB2C-3 Helldiver carrying two types of bombs. For your own aircraft, just overwrite this information with the plane and configuration you are using,

The top of the form is mostly copied directly from Annex B.

Mission/Mission ID - You can choose from a variety of missions, and the Mission ID is an optional field that allows you to identify the specific mission.

From Annex B, we find that both planes have a RP engine type. The ceiling of the TBF is lower than that of the Helldiver, so no data is needed for High altitude for that plane.

Cruise Range and Additional Range

Cruise Range comes directly from Annex B. Neither plane is carrying additional fuel. Other planes may have additional fuel sources that are added to the cruise range to give the total range.

Load Effects

The total load is determined by adding up the hang weight of the torpedoes and ordnance. The TBF carries one torpedo in its bomb bay, but no external ordnance. The Helldiver is carrying one internal bomb and two external bombs, so the "Ext" box in the load section is checked, indicating that the plane is more affected by its load.

Both planes have offensive and defensive guns, as per Annex B

The TBF and Helldiver both carry radar. In the case of the Helldiver, it can do both Air and surface searches, so two lines are used for one radar