



**The 70<sup>th</sup> Anniversary  
of the  
617 Squadron RAF  
Dambuster Raid  
on the  
Moehne and Eder Dams  
16 – 17<sup>th</sup> May 1943**

**FLIGHT SIMULATOR X PROJECT**

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**Why DO I HAVE TO use a Saved Flight?**



(2)

On Page 3 of the Manual for PART 1 it was stated:

**YOU MUST FLY THIS TRIBUTE FROM THE SAVED FLIGHTS.** *Flying from any old airfield will not set up the correct zoom ratio's for the cockpits. In FSX, aircraft setup will take on the settings of your default flight which will not be correct for purpose.*

Then on Page 10 of the Manual for Part 1 the same information in a different way:

*The saved flight not only shows you the way via the GPS display, it also sets the time and the aircraft up with correct window zoom ratios to ensure that the Dann Bombsight is effective. Flying from just any old runway will not do that. You must fly this Tribute from the saved flights.*

**DO NOT CHANGE ANY ZOOM SETTINGS IN A SAVED FLIGHT**

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And simmers will be saying "WHY" is this so when no one else tells me to do such a thing? I never fly a flight plan so why should I start now?

**The last question first:** you will not get the best out of the Project if you do not? The aircraft will not be setup to achieve the outcomes of the Celebration. You will not find the dams easily and if you do, you will not be able to simulate the attack in the way the Dambusters did in 1943.

**The reason:** is that FSX does not act upon the view and other settings often given in a panel. Other FS's did, **not FSX**. If it does take notice, it will only be the settings for the Forward View: This logic often makes it difficult to effectively use aircraft from previous sims without changes.

What FSX does is controlled by what your default opening is. Whether simmers like it or not, the opening is generated from a **SAVED FLIGHT**. If your using the default opening provided with FSX you will probably recognize this sort of image:



(3)

Now if you use the FREE FLIGHT aircraft listing to select AJN, for example, your entry into the 2D Pilots panel will look like this.



Well what is wrong with that? **Only that it was designed to look like the image below:**



The eyeline and zoom ratio has been set up for purpose, **to fly & attack the Moehne & Eder Dams.**

**The set zoom ratio is 0.31999999284744263 with a rotation of 15.00**

(4)

**What about the Virtual Cockpit?** You enter it with F9 or perhaps automatically and from the FSX default flight settings that carry over, you will get the following result:



**How very strange**, because it was designed by the DB70 provider to be as shown below. I doubt whether you can zoom, rotate, pull and shove accurately enough to achieve the same outcome:



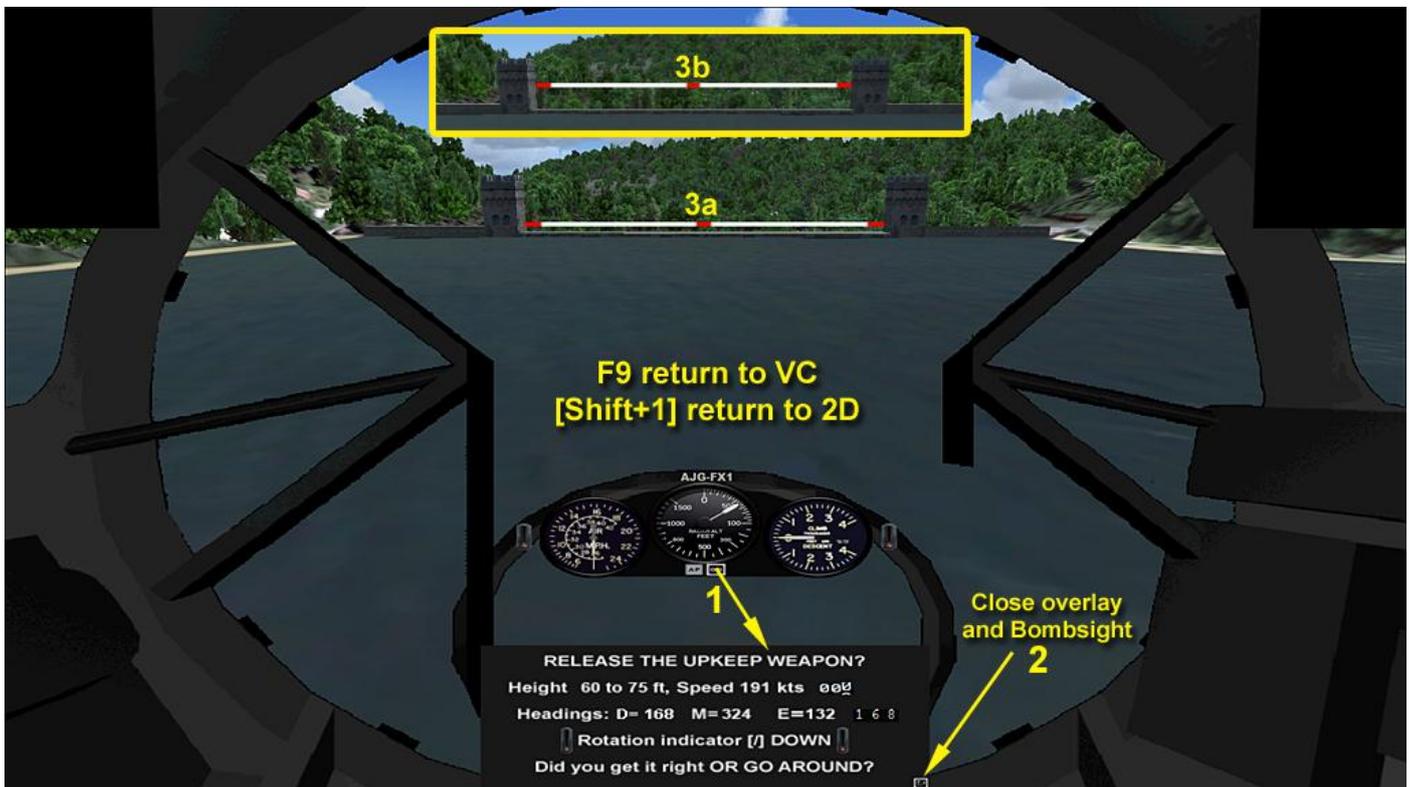
**YOU MUST FLY THIS TRIBUTE FROM THE SAVED FLIGHTS.**

**DO NOT CHANGE ANY ZOOM SETTINGS IN A SAVED FLIGHT**

(5)

If you have made your own opening for FSX, perhaps with your favourite aircraft then whatever settings you saved at the time will be the starting point for flights in FSX. The results might not be much different but they will certainly not achieve the outcome for the DB70 raid on the Ruhr Dams.

The bomb sight is the most critical part of the DB70 set up. The **saved flight and its associated route plan** is the only way to make sure you have it aligned as was designed so as to achieve a simulated release of the weapon at 400 yards from the wall and at + 60-75 feet in your attack.



Your video card resolution has an effect on where the bomb sight is positioned on the towers. The image 3a is for a 16:9 aspect ratio, 1920 x 1080 and image 3b is a 16:10 aspect of 1920 x 1200.

To make it easier for the simmer I have used a compromise that results in the bar being at a different height on the towers for each available video card resolution.

However, for those real Dambuster enthusiasts I have Included with each cockpit an option using notepad where you can set the sight at mid tower height for your particular video card resolution.

The settings for the bomb aimers view come from the 2D panel settings and therefore must be as indicated on page 3:

**zoom ratio 0.31999999284744263 rotation 15.00**

There is **no way** you can achieve those settings in FSX outside of a **SAVED FLIGHT**.

The **Installation** txt file with the download instructs where to put the included saved flights:

[Flight Simulator X Files:](#) *Copy and paste the CONTENTS of the folder into your saved flights folder of the same name.*

When you enter FSX and select FREE FLIGHT your first screen will probably be something like the image over page:



Mouse the **Load** button and the next window will appear from which you can select a flight.



(7)

So, finally, let us look at what the SAVED FLIGHT sets up in the DB70 project:

(1) The position of the kneeboard so it is clear of data induced by [Alt Z]

*[Kneeboard]*  
*Visible=False*  
*Location=0, 20*

(2) The position and size of the ATC so it is also clear of data induced by [Alt Z]

*[Atc\_Menu]*  
*ScreenUniCoords=0, 166, 2200, 3600*

(3) The 2D cockpit zoom and rotation setup

*[Camera.1.1]*  
*Guid={B1386D92-4782-4682-A137-738E25D1BAB5}*  
*Zoom=0.31999999284744263*  
*Translation=0, 0, 0*  
*Rotation=15, 0, 0*

(4) The VC Cockpit zoom and rotation setup

*[Camera.1.2]*  
*Guid={C95EAB58-9E4A-4E2A-A34C-D8D9D948F078}*  
*Zoom=0.31999999284744263*  
*Translation=0, 0, 0*  
*Rotation=15, 0, 0*

**Making them the same means that the real world is simulated in that when switching from cockpit to cockpit the horizon remains in the same place in each forward view from a cockpit.**

(5) a large section follows relating to the planned flight, its route, waypoint details and where the flight will start from. May be in the air, partway along the route etc etc.

(6) The Season, Date and time of the flight.

*[DateTimeSeason]*  
*Season=Spring*  
*Year=1943*  
*Day=86*  
*Hours=12*  
*Minutes=35*  
*Seconds=59*

This flight is set for 27th March 1943 just after midday LOCAL TIME, simulating the first flight made by 617 Squadron as described in the description of the flight.

(7) The aircraft to be used in the flight. This text is a mis-representation of what is in the aircraft.cfg file for the aircraft in which the Title= is the name of the aircraft and Sim= is the airfile used for the basic aircraft dynamics. All other FS's used what was in the Aircraft.cfg but not FSX.

*[Sim.0]*  
*Sim=Avro Type 683 Lancaster AJB bar*

(8) Other sections record radio frequencies, autopilot settings, fuel & throttle/boost settings etc etc.

**You cannot accurately set all of these things manually each time you fly, the SAVED FLIGHT does** and thus makes flying more consistent, easier AND with a better outcome.