



The AI Mystery

Adding AI Aircraft Demystified!

An AVSIM Tutorial

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AVSIM Online

When Microsoft previewed FS2002 at Fanstock in April of 2000, one of the exciting new components of the simulation was the addition of Artificial Intelligence (AI) aircraft. Finally, for those people that found the thought of flying online using Squawkbox a little intimidating or not practical because of access to the Internet, the system was now in place for them to fly just as if they were flying online. Technology was also now at a point where it could handle the extra burden put on it by AI. With the advent of faster graphics cards, faster CPUs and the "growth" of the Flight Simulator graphics engine, now was a good time to introduce AI.

But as most of us who use Flight Simulator have come to know, the best part about the simulation is its open-endedness and the ability for the average simmer to be able to create add-ons for it with relative ease. And as with other aspects of Flight Simulator, Microsoft implemented the system, and still left room for improvement. And just like there have been enhancements made in other areas, the AI has also been enhanced. The first of these was Lee Swordy's **Traffic Tools**. The second innovative program, and one that made the task much easier to achieve was that of Simon Haynes' **yRoute**. There are others, like Elijahu Litvak's **AI Traffic Shuffler**.

The purpose of this guide is to show you how to add your own AI aircraft, along with real world flight schedules. We'll start the guide off by showing you which files control the AI aircraft, how to modify these files, and how to implement the changes. Where necessary, brief tutorials will also be provided. But before you jump in, you need to prepare yourself with certain "tools of the trade."

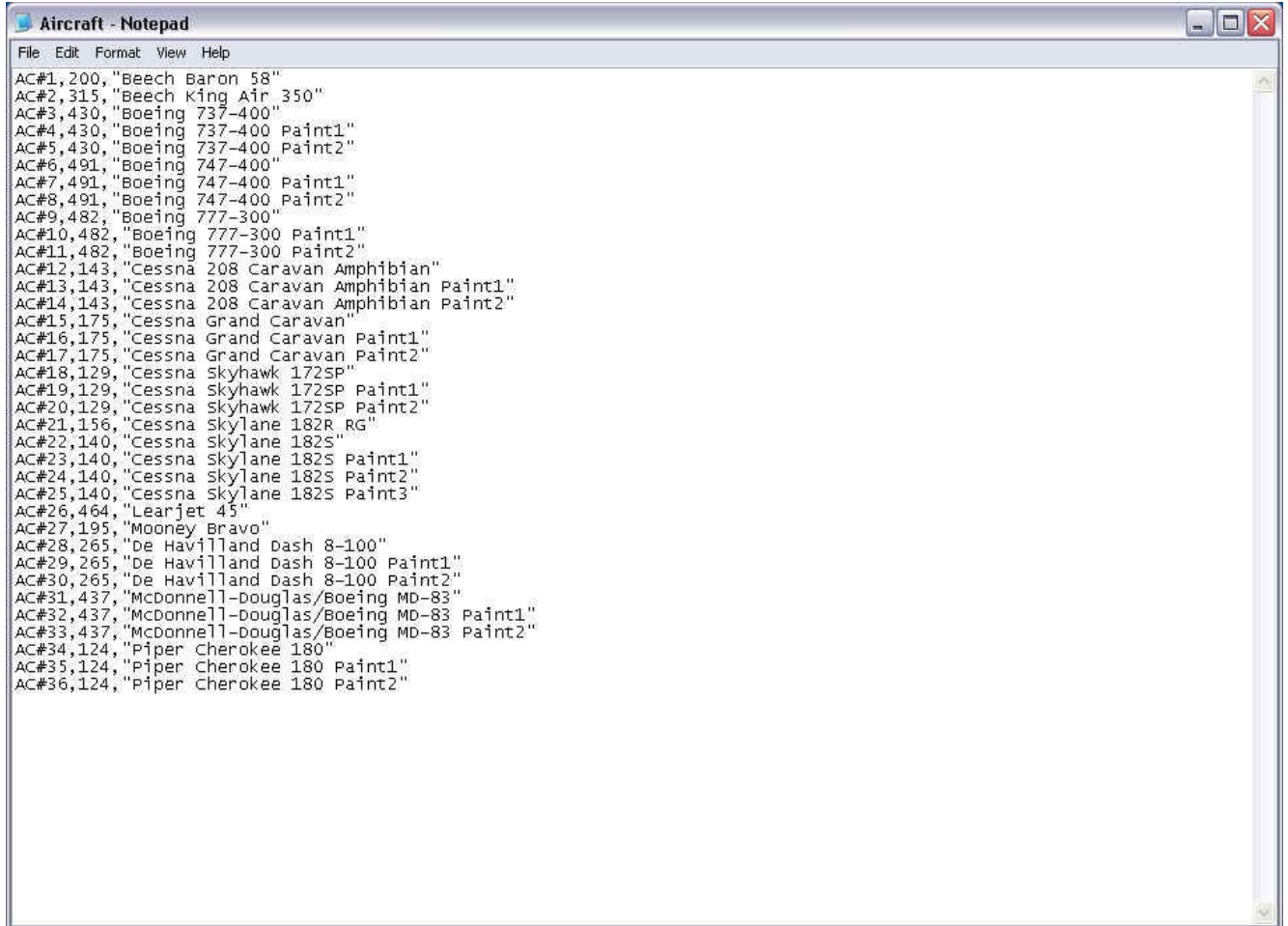
Section #1: What you need?

In actual fact, there are two programs you need to start on the road of adding your own AI aircraft. One of them you already have: Notepad. The other is Traffic Tools from Lee Swordy, which you can download from the Avsim library, [here](#).

The AI aircraft are controlled by a scenery file called TRAFFIC.BGL. This one file contains all the information the program needs to display and control AI aircraft. Traffic Tools is the program used to decompile and compile the TRAFFIC.BGL file. It's actually two executable files, TDECOMPILER.EXE and TCOMPILER.EXE that decompile and compile the BGL file, putting the information into three text files: AIRPORTS.TXT, AIRCRAFT.TXT, and FLIGHTPLANS.TXT. Using Notepad, the only files that need to be modified are the AIRCRAFT.TXT and FLIGHTPLANS.TXT. Let's take a closer look at each of these two files.

Section #2: Aircraft.Txt

In this section, we're going to deal with AIRCRAFT.TXT. This file is where you enter which aircraft you want to use for AI aircraft. The AI aircraft can be any aircraft you download. There are no special requirements. Let's break up the AIRCRAFT.TXT file.



```
File Edit Format View Help
AC#1,200,"Beech Baron 58"
AC#2,315,"Beech King Air 350"
AC#3,430,"Boeing 737-400"
AC#4,430,"Boeing 737-400 Paint1"
AC#5,430,"Boeing 737-400 Paint2"
AC#6,491,"Boeing 747-400"
AC#7,491,"Boeing 747-400 Paint1"
AC#8,491,"Boeing 747-400 Paint2"
AC#9,482,"Boeing 777-300"
AC#10,482,"Boeing 777-300 Paint1"
AC#11,482,"Boeing 777-300 Paint2"
AC#12,143,"Cessna 208 Caravan Amphibian"
AC#13,143,"Cessna 208 Caravan Amphibian Paint1"
AC#14,143,"Cessna 208 Caravan Amphibian Paint2"
AC#15,175,"Cessna Grand Caravan"
AC#16,175,"Cessna Grand Caravan Paint1"
AC#17,175,"Cessna Grand Caravan Paint2"
AC#18,129,"Cessna Skyhawk 172SP"
AC#19,129,"Cessna Skyhawk 172SP Paint1"
AC#20,129,"Cessna Skyhawk 172SP Paint2"
AC#21,156,"Cessna Skylane 182R RG"
AC#22,140,"Cessna Skylane 182S"
AC#23,140,"Cessna Skylane 182S Paint1"
AC#24,140,"Cessna Skylane 182S Paint2"
AC#25,140,"Cessna Skylane 182S Paint3"
AC#26,464,"Learjet 45"
AC#27,195,"Mooney Bravo"
AC#28,265,"De Havilland Dash 8-100"
AC#29,265,"De Havilland Dash 8-100 Paint1"
AC#30,265,"De Havilland Dash 8-100 Paint2"
AC#31,437,"McDonnell-Douglas/Boeing MD-83"
AC#32,437,"McDonnell-Douglas/Boeing MD-83 Paint1"
AC#33,437,"McDonnell-Douglas/Boeing MD-83 Paint2"
AC#34,124,"Piper Cherokee 180"
AC#35,124,"Piper Cherokee 180 Paint1"
AC#36,124,"Piper Cherokee 180 Paint2"
```

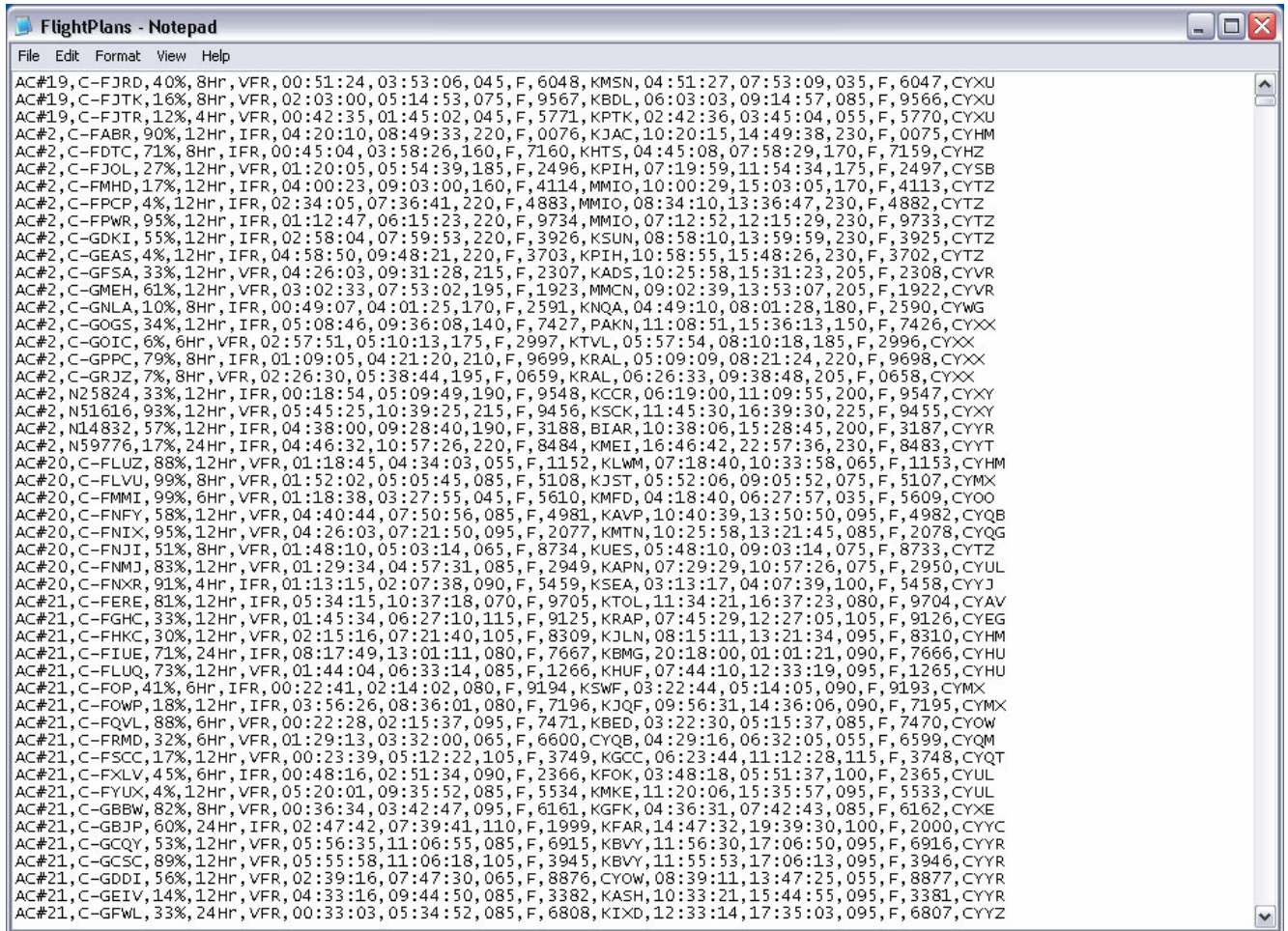
Let's take a look at the first time.

AC # 1, 200, "Beech Baron 58"

Basically, this line says that the first aircraft is a Beech Baron 58. The "200" is the cruise speed of the aircraft at cruise attitude. The name of the aircraft is taken from the AIRCRAFT.CFG file for the particular aircraft you are installing, usually found under the "TITLE" heading.

Section # 3: FLIGHTPLANS.TXT

Now this is where things can get a little technical. When you first open this file, this is what you are presented.



```
FlightPlans - Notepad
File Edit Format View Help
AC#19,C-FJRD,40%,8HR,VFR,00:51:24,03:53:06,045,F,6048,KMSN,04:51:27,07:53:09,035,F,6047,CYXU
AC#19,C-FJTK,16%,8HR,VFR,02:03:00,05:14:53,075,F,9567,KBDL,06:03:03,09:14:57,085,F,9566,CYXU
AC#19,C-FJTR,12%,4HR,VFR,00:42:35,01:45:02,045,F,5771,KPTK,02:42:36,03:45:04,055,F,5770,CYXU
AC#2,C-FABR,90%,12HR,IFR,04:20:10,08:49:33,220,F,0076,KJAC,10:20:15,14:49:38,230,F,0075,CYHM
AC#2,C-FDTC,71%,8HR,IFR,00:45:04,03:58:26,160,F,7160,KHTS,04:45:08,07:58:29,170,F,7159,CYHZ
AC#2,C-FJOL,27%,12HR,VFR,01:20:05,05:54:39,185,F,2496,KPIH,07:19:59,11:54:34,175,F,2497,CYSB
AC#2,C-FMHD,17%,12HR,IFR,04:00:23,09:03:00,160,F,4114,MMIO,10:00:29,15:03:05,170,F,4113,CYTZ
AC#2,C-FPCP,4%,12HR,IFR,02:34:05,07:36:41,220,F,4883,MMIO,08:34:10,13:36:47,230,F,4882,CYTZ
AC#2,C-FPWR,95%,12HR,IFR,01:12:47,06:15:23,220,F,9734,MMIO,07:12:52,12:15:29,230,F,9733,CYTZ
AC#2,C-GDKI,55%,12HR,IFR,02:58:04,07:59:53,220,F,3926,KSUN,08:58:10,13:59:59,230,F,3925,CYTZ
AC#2,C-GEAS,4%,12HR,IFR,04:58:50,09:48:21,220,F,3703,KPIH,10:58:55,15:48:26,230,F,3702,CYTZ
AC#2,C-GFSA,33%,12HR,VFR,04:26:03,09:31:28,215,F,2307,KADS,10:25:58,15:31:23,205,F,2308,CYVR
AC#2,C-GMEH,61%,12HR,VFR,03:02:33,07:53:02,195,F,1923,MMCN,09:02:39,13:53:07,205,F,1922,CYVR
AC#2,C-GNLA,10%,8HR,IFR,00:49:07,04:01:25,170,F,2591,KNQA,04:49:10,08:01:28,180,F,2590,CYWG
AC#2,C-GOGS,34%,12HR,IFR,05:08:46,09:36:08,140,F,7427,PAKN,11:08:51,15:36:13,150,F,7426,CYXX
AC#2,C-GOTC,6%,6HR,VFR,02:57:51,05:10:13,175,F,2997,KTVL,05:57:54,08:10:18,185,F,2996,CYXX
AC#2,C-GPPC,79%,8HR,IFR,01:09:05,04:21:20,210,F,9699,KRAL,05:09:09,08:21:24,220,F,9698,CYXX
AC#2,C-GRJZ,7%,8HR,VFR,02:26:30,05:38:44,195,F,0659,KRAL,06:26:33,09:38:48,205,F,0658,CYXX
AC#2,N25824,33%,12HR,IFR,00:18:54,05:09:49,190,F,9548,KCCR,06:19:00,11:09:55,200,F,9547,CYXY
AC#2,N51616,93%,12HR,VFR,05:45:25,10:39:25,215,F,9456,KSCK,11:45:30,16:39:30,225,F,9455,CYXY
AC#2,N14832,57%,12HR,IFR,04:38:00,09:28:40,190,F,3188,BIAR,10:38:06,15:28:45,200,F,3187,CYXR
AC#2,N59776,17%,24HR,IFR,04:46:32,10:57:26,220,F,8484,KMEI,16:46:42,22:57:36,230,F,8483,CYYT
AC#20,C-FLUZ,88%,12HR,VFR,01:18:45,04:34:03,055,F,1152,KLWM,07:18:40,10:33:58,065,F,1153,CYHM
AC#20,C-FLVU,99%,8HR,VFR,01:52:02,05:05:45,085,F,5108,KJST,05:52:06,09:05:52,075,F,5107,CYMX
AC#20,C-FNMI,99%,6HR,VFR,01:18:38,03:27:55,045,F,5610,KMFD,04:18:40,06:27:57,035,F,5609,CYOO
AC#20,C-FNFY,58%,12HR,VFR,04:40:44,07:50:56,085,F,4981,KAVP,10:40:39,13:50:50,095,F,4982,CYQB
AC#20,C-FNIX,95%,12HR,VFR,04:26:03,07:21:50,095,F,2077,KMTN,10:25:58,13:21:45,085,F,2078,CYQG
AC#20,C-FNJI,51%,8HR,VFR,01:48:10,05:03:14,065,F,8734,KUES,05:48:10,09:03:14,075,F,8733,CYTZ
AC#20,C-FNMJ,83%,12HR,VFR,01:29:34,04:57:31,085,F,2949,KAPN,07:29:29,10:57:26,075,F,2950,CYUL
AC#20,C-FNXR,91%,4HR,IFR,01:13:15,02:07:38,090,F,5459,KSEA,03:13:17,04:07:39,100,F,5458,CYYJ
AC#21,C-FERE,81%,12HR,IFR,05:34:15,10:37:18,070,F,9705,KTOL,11:34:21,16:37:23,080,F,9704,CYAV
AC#21,C-FGHC,33%,12HR,VFR,01:45:34,06:27:10,115,F,9125,KRAP,07:45:29,12:27:05,105,F,9126,CYEG
AC#21,C-FHKC,30%,12HR,IFR,02:15:16,07:21:40,105,F,8309,KJLN,08:15:11,13:21:34,095,F,8310,CYHM
AC#21,C-FTUE,71%,24HR,IFR,08:17:49,13:01:11,080,F,7667,KBMG,20:18:00,01:01:21,090,F,7666,CYHU
AC#21,C-FLUQ,73%,12HR,VFR,01:44:04,06:33:14,085,F,1266,KHUF,07:44:10,12:33:19,095,F,1265,CYHU
AC#21,C-FOP,41%,6HR,IFR,00:22:41,02:14:02,080,F,9194,KSUF,03:22:44,05:14:05,090,F,9193,CYMX
AC#21,C-FOWP,18%,12HR,IFR,03:56:26,08:36:01,080,F,7196,KJQF,09:56:31,14:36:06,090,F,7195,CYMX
AC#21,C-FQVL,88%,6HR,VFR,00:22:28,02:15:37,095,F,7471,KBED,03:22:30,05:15:37,085,F,7470,CYOW
AC#21,C-FRMD,32%,6HR,VFR,01:29:13,03:32:00,065,F,6600,CYQB,04:29:16,06:32:05,055,F,6599,CYQM
AC#21,C-FSCC,17%,12HR,VFR,00:23:39,05:12:22,105,F,3749,KGCC,06:23:44,11:12:28,115,F,3748,CYQT
AC#21,C-FXLV,45%,6HR,IFR,00:48:16,02:51:34,090,F,2366,KFOK,03:48:18,05:51:37,100,F,2365,CYUL
AC#21,C-FYUX,4%,12HR,VFR,05:20:01,09:35:52,085,F,5534,KMKE,11:20:06,15:35:57,095,F,5533,CYUL
AC#21,C-GBBW,82%,8HR,VFR,00:36:34,03:42:47,095,F,6161,KGFK,04:36:31,07:42:43,085,F,6162,CYXE
AC#21,C-GBJP,60%,24HR,IFR,02:47:42,07:39:41,110,F,1999,KFAR,14:47:32,19:39:30,100,F,2000,CYYC
AC#21,C-GCQY,53%,12HR,VFR,05:56:35,11:06:55,085,F,6915,KBVY,11:56:30,17:06:50,095,F,6916,CYYR
AC#21,C-GCSC,89%,12HR,VFR,05:55:58,11:06:18,105,F,3945,KBVY,11:55:53,17:06:13,095,F,3946,CYYR
AC#21,C-GDDI,56%,12HR,VFR,02:39:16,07:47:30,065,F,8876,CYOW,08:39:11,13:47:25,055,F,8877,CYYR
AC#21,C-GEIV,14%,12HR,VFR,04:33:16,09:44:50,085,F,3382,KASH,10:33:21,15:44:55,095,F,3381,CYYR
AC#21,C-GFWL,33%,24HR,VFR,00:33:03,05:34:52,085,F,6808,KIXD,12:33:14,17:35:03,095,F,6807,CYYZ
```

That's an awful lot of gibberish. But after going through this section, all that gibberish will mean something. Let's take the very first line and break it up.

AC # 19, C-FJRD, 40%, 8 hr, 00:51:24, 03:53:06, 045, F, 6048, KMSN, 04:51:27, 07:53:09, 035, F, 6047, CYXU.

The above line can be broken down into three parts: the base component, leg 1 and leg 2.

The base component is this:

AC # 19, C-FJRD, 40%, 8hr, VFR.

Remember the number we saw in the AIRCRAFT.TXT file? Well, here it is again. This number is used to tell Flight Simulator which aircraft it should use for this particular flight plan. So if we look back, AC # 19 is the default Cessna sky hawk 172SP Paint #1. The next part, C-FJRD, is used for the ATC call sign. The percentage # is used to

specify when this flight should appear, based on your Flight Simulator 2002 setting. If the setting is lower than this number, this flight won't appear, which is why it is a good idea to leave it at 100%,

Section #4: Implementation

Now that we have a solid understanding about the AIRCRAFT.TXT file, the FLIGHTPLANS.TXT file and the "gibberish" contained in these two files, let's move on to the final part; implementing AI.

There are two ways to implement your own AI: yourself, or use the Internet. Doing it yourself would be a very time consuming matter, but it is possible. But we're not going to go that route. Instead, we're going to make use of three websites: Avsim's own File Library, The AI Traffic Group, and Project AI. Both of these websites provide AI traffic flight plans based on real world airlines and flight schedules. The difference is the ease. Project AI has a self-extracting base installer that installs a whole whack of AI aircraft, as well as making the necessary modifications to the AIRCRAFT.TXT file. Then, you download individual flight schedules for individual airlines, again in EXE format and install them. The executable automatically decompiles the TRAFFIC.BGL file, adds the flight plans to the FLIGHTPLAN.TXT file, and recompiles the TRAFFIC.BGL file. No mess, no fuss.

The AI Traffic Group, on the other hand, provides you with a zip file that contains an HTML file that contains the flight plans. You have to manually download your own aircraft, use TTools to manually decompile and recompile the three TXT files, and use Notepad to add the flight plans from the HTML file to the FLIGHT PLANS.TXT file. Since the Project AI installation is pretty straight forward, we'll discuss the manual installation.

Step #1: Download the tools

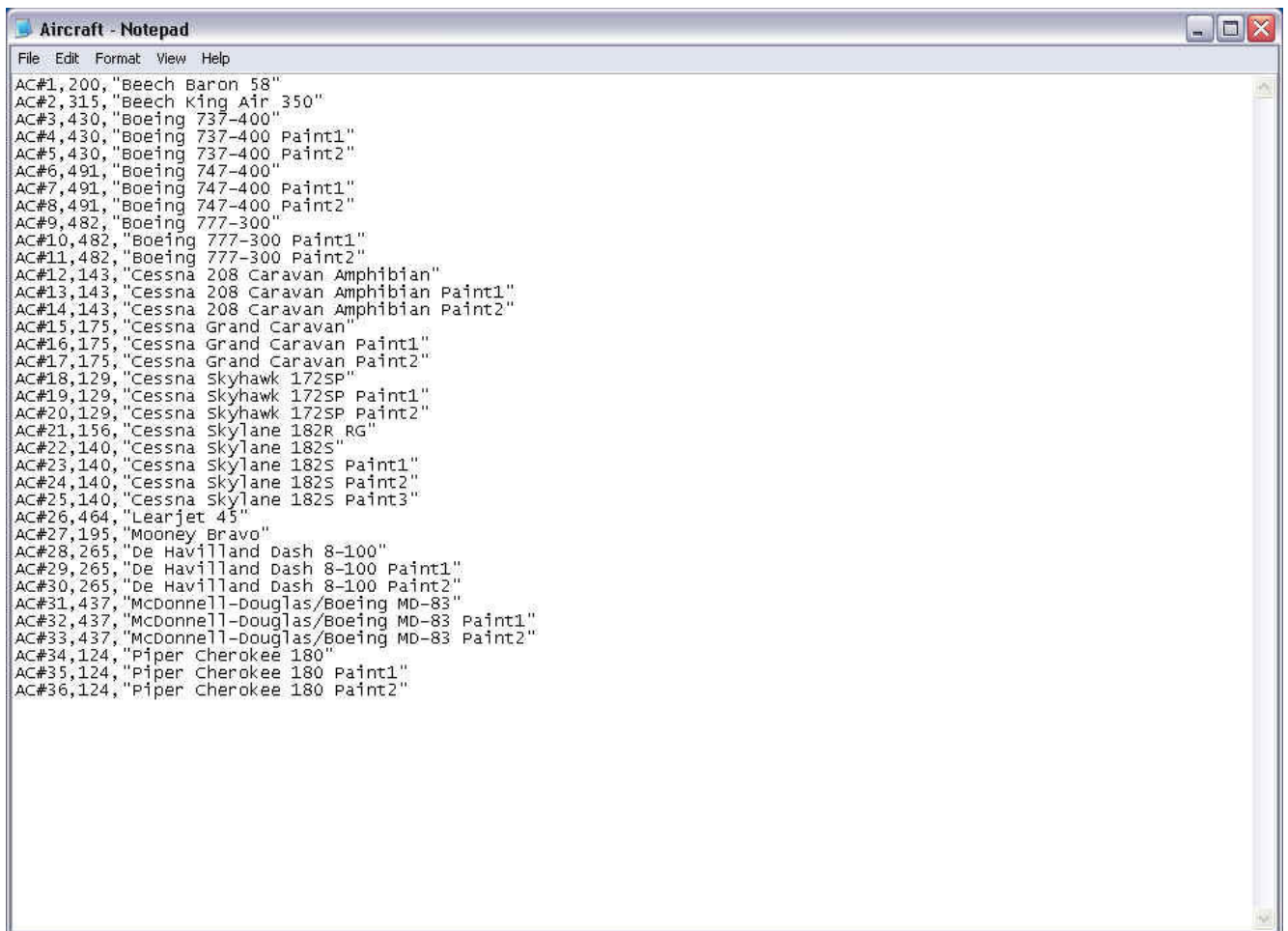
1. [TTools](#) by Lee Swordy
2. Flight plans you would like to add to Flight Simulator.
 - a) [Avsim File Library](#)
 - b) [The AI Traffic Group](#)
3. Aircraft that are listed in the flight plans. Check out the Avsim collection as well as the hundred of other websites available.
4. This guide. (PDF or HTML link)

Step #2: Decompile

Unzip the two files that make up Traffic Tools into the FS2002 directory and double click/run the TDecompile file. A MS-DOS prompt/command prompt screen will come up, showing you the decompiling status. Once that is done, press any key to continue.

Step #3: Editing the AIRCRAFT.TXT file

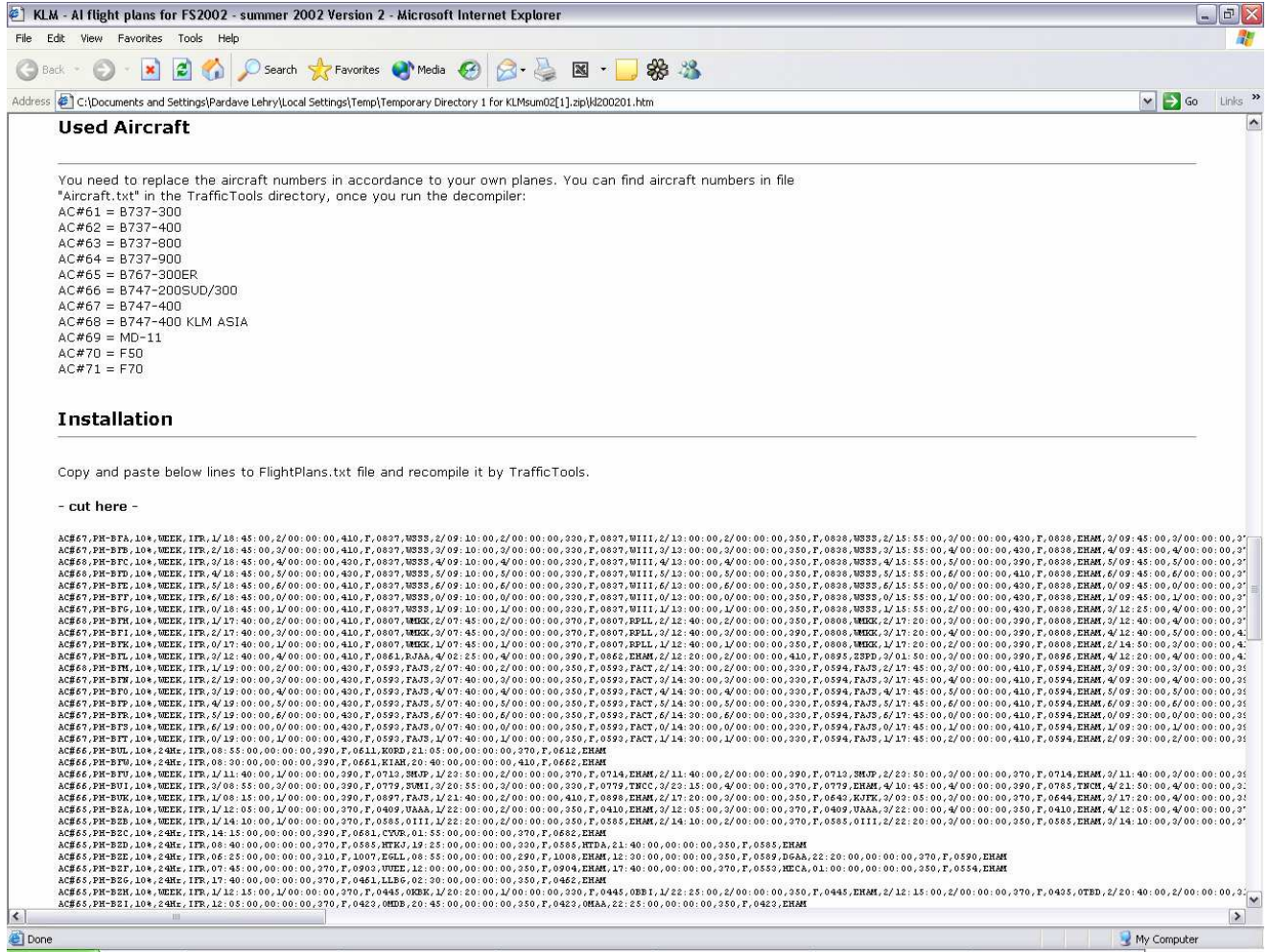
Before we start the actual editing, install the aircraft that you plan to use as AI aircraft. Then open up the file that contains the AI flight plan. Finally, browse to your FS2002 directory and open AIRCRAFT.TXT. In its original state, it should look something like the screenshot below.



```
File Edit Format View Help
AC#1,200,"Beech Baron 58"
AC#2,315,"Beech King Air 350"
AC#3,430,"Boeing 737-400"
AC#4,430,"Boeing 737-400 Paint1"
AC#5,430,"Boeing 737-400 Paint2"
AC#6,491,"Boeing 747-400"
AC#7,491,"Boeing 747-400 Paint1"
AC#8,491,"Boeing 747-400 Paint2"
AC#9,482,"Boeing 777-300"
AC#10,482,"Boeing 777-300 Paint1"
AC#11,482,"Boeing 777-300 Paint2"
AC#12,143,"Cessna 208 Caravan Amphibian"
AC#13,143,"Cessna 208 Caravan Amphibian Paint1"
AC#14,143,"Cessna 208 Caravan Amphibian Paint2"
AC#15,175,"Cessna Grand Caravan"
AC#16,175,"Cessna Grand Caravan Paint1"
AC#17,175,"Cessna Grand Caravan Paint2"
AC#18,129,"Cessna skyhawk 172SP"
AC#19,129,"Cessna skyhawk 172SP Paint1"
AC#20,129,"Cessna skyhawk 172SP Paint2"
AC#21,156,"Cessna skylane 182R RG"
AC#22,140,"Cessna skylane 182S"
AC#23,140,"Cessna skylane 182S Paint1"
AC#24,140,"Cessna skylane 182S Paint2"
AC#25,140,"Cessna skylane 182S Paint3"
AC#26,464,"Learjet 45"
AC#27,195,"Mooney Bravo"
AC#28,265,"De Havilland Dash 8-100"
AC#29,265,"De Havilland Dash 8-100 Paint1"
AC#30,265,"De Havilland Dash 8-100 Paint2"
AC#31,437,"McDonnell-Douglas/Boeing MD-83"
AC#32,437,"McDonnell-Douglas/Boeing MD-83 Paint1"
AC#33,437,"McDonnell-Douglas/Boeing MD-83 Paint2"
AC#34,124,"Piper Cherokee 180"
AC#35,124,"Piper Cherokee 180 Paint1"
AC#36,124,"Piper Cherokee 180 Paint2"
```

Now, this is where you have an option. You can either number the aircraft consecutively based on the original file, or you can cut and paste the lines that you should find in the AI flight plan file. If you go with the former, you'll have to make the numerical changes in the AI flight plan once you copy that over. If you go with the latter chances the only entry you will have to change is the name used for the aircraft. We'll go with the latter.

The example we're going to use is the KLM flight schedule provided by the AI Traffic Group. I also download the CSI MD-11, a Project Open Sky 767-300 repaint, the Feel Real Flight Boeing 747-400, as well as a 737-800, and a texture set for the default 737-400. The AI Traffic Group provides the information in an HTML, a screenshot of which is presented below.

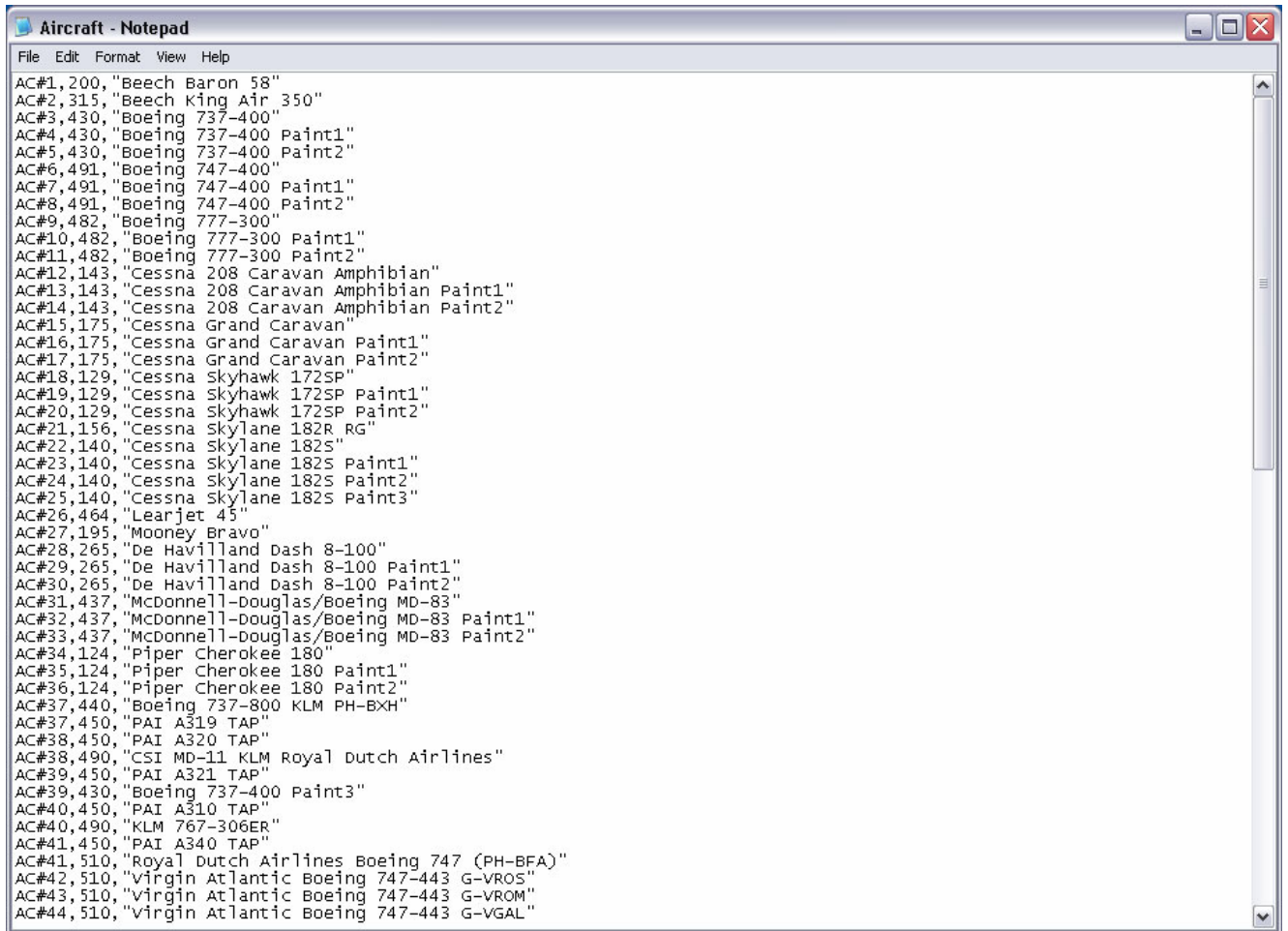


So with the HTML file and the AIRCRAFT.TXT files open, we're set to go. Simply scroll down to the area where the aircraft are shown, as in the screen shot below, select it, copy it, and paste it in the AIRCRAFT.TXT file, as in the 2nd screen shot below. Next open up the AIRCRAFT.CFG file for the aircraft you just installed. We'll use the CSI MD-11.

```
Aircraft - Notepad
File Edit Format View Help
[fltsim.0]
title="CSI MD-11 KLM Royal Dutch Airlines"
sim=CSI_MD-11
model=
panel=
sound=
texture=
checklists=
description=McDonnell Douglas MD11\n-----\nFDE Version 2.48\nBuild:
B\n-----\nDesign: Jason Brown\nTextures: Jason Brown\n Ricardo Trujillo\nFDE:
Andrew Reynolds\n\ncopyright December 2000\n
ui_manufacturer=Boeing
ui_type=MD-11
ui_variation=KLM Royal Dutch
atc_heavy=1
atc_id=
atc_airline=KLM
atc_flight_number=
[General]
performance=Power Plant: Pratt & Whitney Pw4460\nThrust Rating: 60,000 lbs st each\nEmpty weight:
285,300 lbs\nZero Fuel weight: 352,750 lbs\nMZFW: 400,000 lbs\nMTOW:
630,000 lbs\nMLW: 430,000 lbs\nMax Payload: 114,100 lbs\nFuel:
261,423 lbs\nService Ceiling: 42,000 ft\nNormal Cruise: Mach 0.83\nRange:
6,850nm\n\n
atc_type=BOEING AIRCRAFT
atc_model=MD11
[WEIGHT_AND_BALANCE]
reference_datum_position= 0.000, 0.000, 0.000
empty_weight_CG_position= 0.000, 0.000, 0.000
max_number_of_stations=50
station_load.0=0.000000,0.000000,0.000000,0.000000
empty_weight= 352750.000
empty_weight_roll_MOI= 19378280.000
empty_weight_pitch_MOI= 39637518.000
empty_weight_yaw_MOI= 35997582.000
empty_weight_coupled_MOI= 1300.000
max_gross_weight= 611470.493
CG_forward_limit= 0.000
CG_aft_limit= 1.000
[Fuel]
Center1= 0.000, 0.000, 0.000, 24441.000, 0.000
LeftMain= 0.000, -26.833, 0.000, 6108.000, 0.000
LeftAux= -80.750, 0.000, 9.333, 979.000, 0.000
RightMain= 0.000, 26.833, 0.000, 6108.000, 0.000
RightAux= -80.750, 0.000, 9.333, 979.000, 0.000
fuel_type=2.000000
number_of_tank_selectors=1
[airplane_geometry]
wing_area= 3648.000
```

Notice the second line that says TITLE=. Either select the name that appears after the "=" including quotes and paste it into the AIRCRAFT.TXT file next to the correct aircraft, or simply type this name in directly on the correct line in AIRCRAFT.TXT file.

Repeat this step for every aircraft that you installed that you plan to use as AI aircraft. Our example looks like this:



```
AC#1,200,"Beech Baron 58"  
AC#2,315,"Beech King Air 350"  
AC#3,430,"Boeing 737-400"  
AC#4,430,"Boeing 737-400 Paint1"  
AC#5,430,"Boeing 737-400 Paint2"  
AC#6,491,"Boeing 747-400"  
AC#7,491,"Boeing 747-400 Paint1"  
AC#8,491,"Boeing 747-400 Paint2"  
AC#9,482,"Boeing 777-300"  
AC#10,482,"Boeing 777-300 Paint1"  
AC#11,482,"Boeing 777-300 Paint2"  
AC#12,143,"Cessna 208 Caravan Amphibian"  
AC#13,143,"Cessna 208 Caravan Amphibian Paint1"  
AC#14,143,"Cessna 208 Caravan Amphibian Paint2"  
AC#15,175,"Cessna Grand Caravan"  
AC#16,175,"Cessna Grand Caravan Paint1"  
AC#17,175,"Cessna Grand Caravan Paint2"  
AC#18,129,"Cessna Skyhawk 172SP"  
AC#19,129,"Cessna Skyhawk 172SP Paint1"  
AC#20,129,"Cessna Skyhawk 172SP Paint2"  
AC#21,156,"Cessna Skylane 182R RG"  
AC#22,140,"Cessna Skylane 182S"  
AC#23,140,"Cessna Skylane 182S Paint1"  
AC#24,140,"Cessna Skylane 182S Paint2"  
AC#25,140,"Cessna Skylane 182S Paint3"  
AC#26,464,"Learjet 45"  
AC#27,195,"Mooney Bravo"  
AC#28,265,"De Havilland Dash 8-100"  
AC#29,265,"De Havilland Dash 8-100 Paint1"  
AC#30,265,"De Havilland Dash 8-100 Paint2"  
AC#31,437,"McDonnell-Douglas/Boeing MD-83"  
AC#32,437,"McDonnell-Douglas/Boeing MD-83 Paint1"  
AC#33,437,"McDonnell-Douglas/Boeing MD-83 Paint2"  
AC#34,124,"Piper Cherokee 180"  
AC#35,124,"Piper Cherokee 180 Paint1"  
AC#36,124,"Piper Cherokee 180 Paint2"  
AC#37,440,"Boeing 737-800 KLM PH-BXH"  
AC#37,450,"PAI A319 TAP"  
AC#38,450,"PAI A320 TAP"  
AC#38,490,"CSI MD-11 KLM Royal Dutch Airlines"  
AC#39,450,"PAI A321 TAP"  
AC#39,430,"Boeing 737-400 Paint3"  
AC#40,450,"PAI A310 TAP"  
AC#40,490,"KLM 767-306ER"  
AC#41,450,"PAI A340 TAP"  
AC#41,510,"Royal Dutch Airlines Boeing 747 (PH-BFA)"  
AC#42,510,"Virgin Atlantic Boeing 747-443 G-VROS"  
AC#43,510,"Virgin Atlantic Boeing 747-443 G-VROM"  
AC#44,510,"Virgin Atlantic Boeing 747-443 G-VGAL"
```

Save the AIRCRAFT.TXT file and close it. Also close any AIRCRAFT.CFG files that you may still leave open.

Step # 4: Editing the FLIGHT PLAN.TXT file

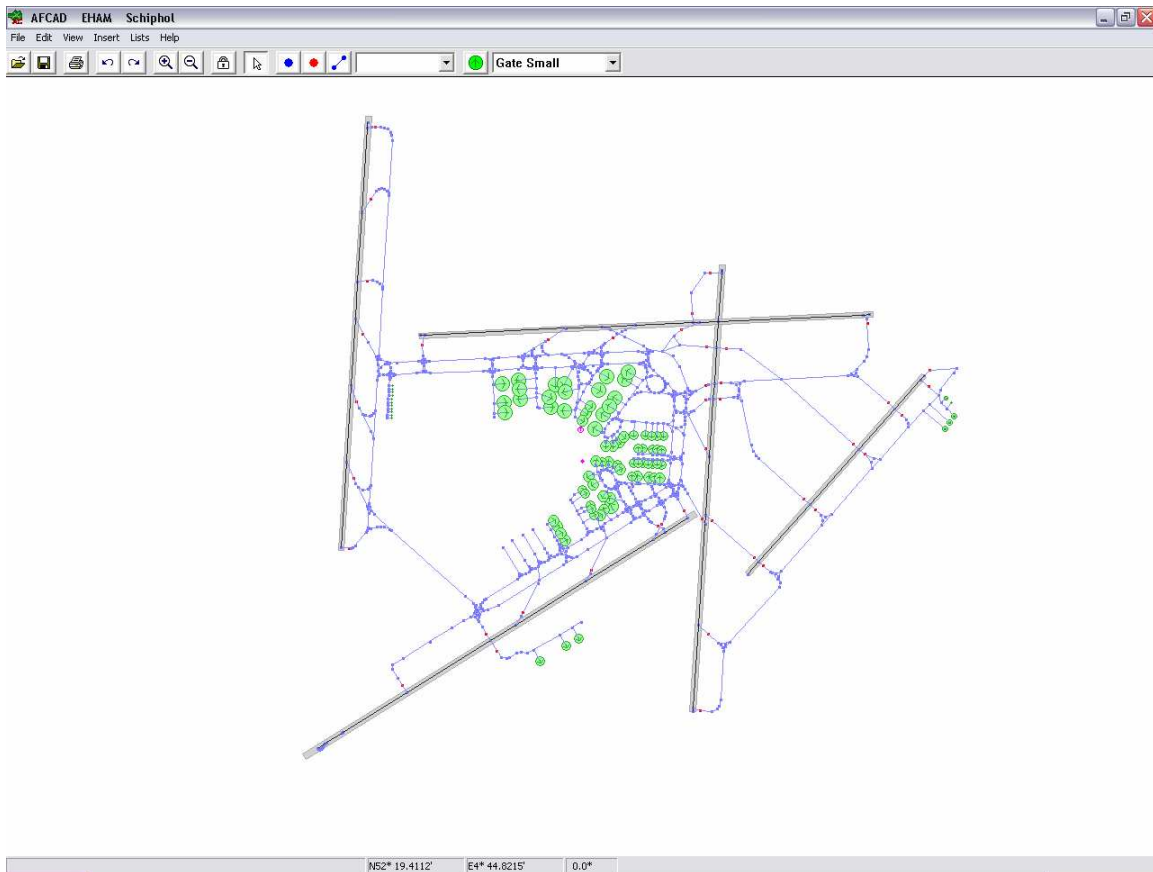
Believe it or not, the hardest part of adding AI traffic is done. Now all you have to do is open the FLIGHT PLAN.TXT file, and copy and paste the flight plan portion from the HTML file to the TXT file. If you go with the consecutive aircraft numbering in the AIRCRAFT.TXT file, then you'll have to make the necessary numbering changes to the flight plan you just posted, otherwise, save the file and close it. Repeat for all flight plans you would like to enter.

Step #5: Recompile

After all your AI flight plans have been entered, and all the files have been closed, simply click the TCompile icon in Windows Explorer to recompile the TRAFFIC.BGL file. Depending on how fast your machine is and how many flight plans you entered, this can be the longest part in adding AI traffic.

Step #6: AFCAD

For some of you, there may be one extra step. If you're using custom scenery, you may need to use AFCAD to change the gate positioning. This is another program from Lee Swordy that allows you to change the gate positioning in Flight Simulator. In our example, I've installed the Netherlands scenery from The NL2000 Design Team and thus, when I finished this and went to EHAM, I noticed some of the AI aircraft were parked in the buildings. Luckily, someone had created an AFCAD file that had the correct gate positioning and it was simply a matter of loading the file into AFCAD and saving the changes made to the default structure. So all said and done, this is what Schiphol Airport looked like after installing the AI aircraft.





Step 7: Enjoy

Quite a difference from the bland, boring look of the default scenery. Mind you though, on my Athlon XP 1700+ with a GeForce 3 video card, and 512MB RAM, this particular scenery setup brings my system to its knees so do be careful in how much AI you implement on your machine. Too much could bring your machine to its knees.

By incorporating AI traffic, you are introduced to a whole new face of flight simulation. The biggest is the air traffic control side. If you were intimidated about flying online using VATSIM, well now you can fly offline with the AI traffic and still have a dynamic situation. Create yourself an IFR flight plan and now fly it. Before you were alone, but now, you have other aircraft to look at, fly with and avoid. ATC will issue you hold short instruction because of traffic landing, as well as taxi into position and hold instructions. If you fly aircraft like the Dreamfleet 737 or PSS Airbus, the TCAS actually works. You will actually see little blips on your ND, indicating other traffic in your area. Get too close, and watch the alert feature go off. For those of you that fly using other panels, there's a neat TCAS add-on that you can download and install right into your panel, giving you the full functionality of the system.

And all this without spending a penny. Some may find adding AI a bit of a challenge, but it's definitely well worth it. Since the release of FS2002, I was flying by myself. But after I added the first real world airline flight schedule, I went and downloaded all the flight schedules at Project AI and installed them. Now I always fly with other traffic and it's great. If you haven't implemented AI traffic yet, give it one shot and if you don't like it, email me and let me know why. I guarantee you won't go back.

Links

[TTools by Lee Swordy](#)

[AFCAD by Lee Swordy](#)

[Project AI](#)

[The AI Traffic Group](#)

[CSI](#)

[Project Airbus](#)

[Feel Real Flight](#)

[Project Open Sky](#)