

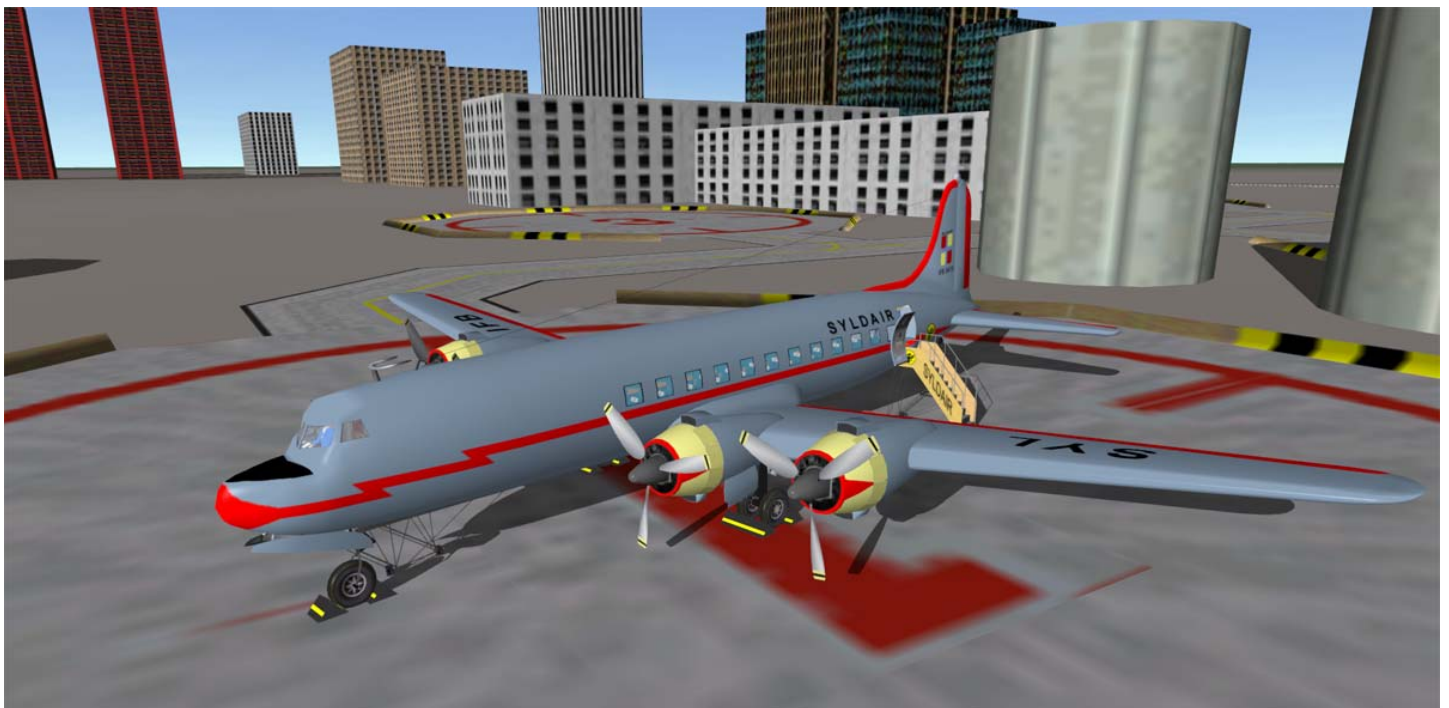
The Tintin's DC-6 (of "Destination Moon")

© Jacques Maurice (JacquesMomo) 2015

This add-on was created especially for use with the "Tintin on the Moon" add-on ("*Tintin sur la Lune*") from **Papyref** and **myself**, but it can also be used without installing this major complement for **Orbiter**.

This add-on is for Orbiter 2010. It is free and can be used only for recreational purposes.

Commercial use is strictly prohibited. Using this add-on and modified for private use is naturally allowed, but any publication of modification can only be made with the authorization of the author.



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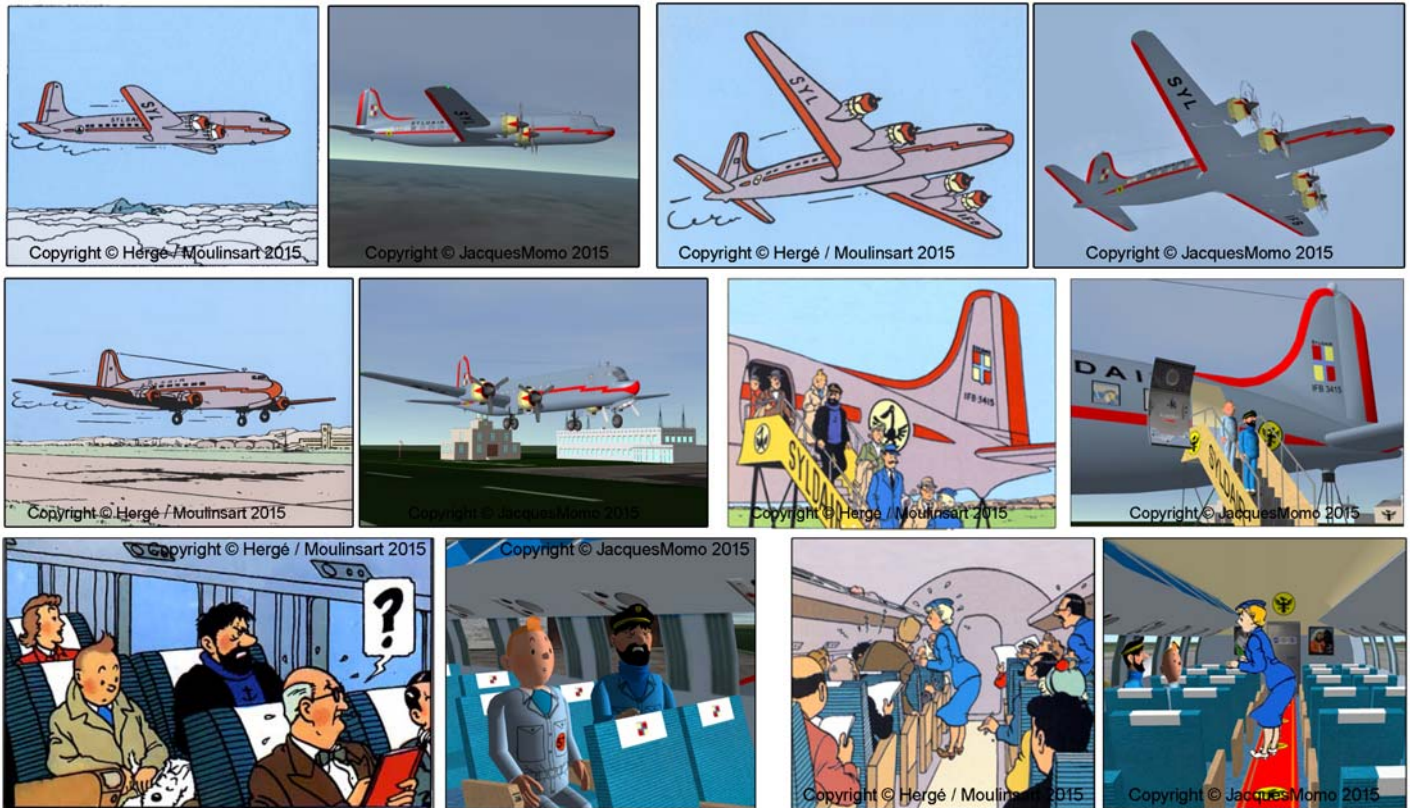
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Remark : All small beetles are from ©Gotlib



- 1 - DESCRIPTION

This aircraft is the **Douglas DC-6** of the Syldavian Airline drawn by Hergé. Tintin and Captain Haddock uses it to meet Calculus in Syldavia. This is illustrated at page 2 and 3 of the "*Destination Moon*" album.



Many thanks to :

- **Hergé** for his two albums of comic "*Destination Moon*" and "*Explorers on the Moon*".
- **Dr.Martin Schweiger** for **Orbiter**.
- **DanSteph** for **OrbiterSound**, the **DG-IV**, **UMmu**, **UCGO** and **CARGO**.
- **Vinka** for his module **Spacecraft** module allowing the realization of numerous animations and more, without needing to know how to program with **C++** language.

Special thanks to Vinka :

Some time ago, I sent a message to **Vinka** to give him a remark about the possibility (according to his doc) to have functional flaps. But after few tries it seemed that this was not the case. And the following message - due to a remark from **Papyref** (it's his fault !!) - to who I had sent for test a "beta" of my **DC-6**, I took the liberty to suggest that it would be awesome to have the opportunity to combine an animation (like turning the wheels or propeller) with the *main thrust* control.

Few days after I received from him a **new Spacecraft module** with this new feature, but in addition there were a lot of other innovations !..

So I rushed to test this with my aircraft and this was followed by a regular correspondence between **Vinka** and me. And, with surprising rapidity, he started to add to its module (now called **Spacecraft4**) all the features I wished or requested ... A great gift !!! So I had the privilege to be the tester of a new Spacecraft module.

This reminds me the beginning of the first versions of **Orbiter** and the **Forum of Dan** that I was following very often, but without daring to write, being so fascinated by some "orbinautes" who did very sophisticated add-ons I greatly admired... (**Papyref** was one of them – He was the first one who made an add-on with *Tintin and the Moon Rocket* – but of course as well Dan, Vinka, Mustard, and many others).

And today I have the privilege to introduce to you a new add-on (which I think is the most elaborate of all I've done) and at the same time...
a new module by Vinka, Spacecraft 4th version !!!



- 2 - INSTALLATION

A) Installation :

All you have to do is to unzip the **DC6_Tintin.zip** file in the root folder of your Orbiter.
(Do not forget to check the option "Use folder names").
No files will be overwritten.



B) Additional (but not mandatory) add-ons to install :

You can use this add-on without installing the others one, but some scenarios require the addition of some add-ons which are listed below :

- **Orbitersound 4.0** (by **Dan**) but... I think we ought to remind ourselves of that ?
- **Tintin sur la Lune** (with **Papyref**) <http://www.orbithangar.com/searchid.php?ID=6163>
- **Tintin on the Moon (patch R1)** <http://www.orbithangar.com/searchid.php?ID=6841>
- **DeltaGliderIV-3 + UMmu 3.0 + UCGO 3.0 2014 edition** (by **Dansteph**)
<http://orbiter.dansteph.com/forum/index.php?language=english&page=download>

You can have a look at the list of scenarios which require these add-ons on page 10.

C) Bonus :

If you have a look at the <your_Orbiter>\Doc\Tintin\ folder you will find 2 **ZIP**-files :

① **Tintin sur la Lune Patch R2.zip** ...

If you have previously installed "Tintin sur la Lune" and the "patch_R1", unzip this file in the root folder of your "Orbiter". Some files will be updated (and overwritten).

A list of these updates are listed in the "**Patch R2 (description).pdf**" file (Doc\Tintin folder).

Note :

Do not forget that is necessary to install in the following order these 3 Tintin-zip files :

- ① Tintin sur la Lune (Tintin on the Moon)
- ② Patch R1
- ③ Patch R2

② **New Skins Templates.zip** .

For more explanation, please read the **New Skins (En).pdf** file. Everything is described.



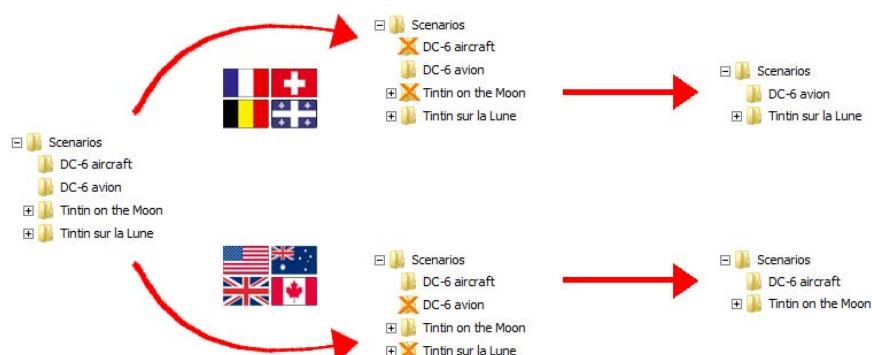
D) One last point :

This step is not absolutely necessary, but as I like well organized files, you can do this :

Open *Windows Explorer*, then go to the [**scenarios**] folder of your orbiter, and delete the following folders (and all files inside it) : [**DC-6 avion**] and [**Tintin sur la Lune**].

Maybe you wonder why be so cruel? Well I have set duplicates scenarios : both in French and in English. Our French speaking friends will do the same... but in opposite way...

☺ A small explanatory drawing for clarification (I see one or two of you who do not follows...) :



- 3 - COMMANDS KEYS



To use this aircraft, you have to review some control keys...

So, here is a brief summary of the keys to know well.

For more details, read later in this doc ("Appendix" chapters).

A) Orbiter Specific keys :

I will not insult you by reminding how to use the Orbiter main controls, but let me remember for you few commands that are helpful (even essential) for the control of this aircraft :

Ctrl + **/**

→ Toggle between **RCS on** and **RCS off**.
(Read "taxiing" on page 5)

Insert and/or **Delete**

→ Elevator Trim command.
(Read "atmospheric flight" on page 5)

Ctrl + **0** NUMPAD

→ Switch on the landing lights.

Ctrl + **Del** NUMPAD

→ Switch off the landing lights.

; and **>**

→ Brakes.

B) Spacecraft4 specific keys for the DC-6 :

G

→ Extend / Retract the landing **G**ear

K

→ Open / Close the aircraft doors (and many other things : see further)...

LEFT **Shift** + **0** NUMPAD or **)**

→ Extend / Retract flaps

LEFT **Shift** + **1** NUMPAD or **!**

→ Display / Mask the **MFDs** and the **HUD** (in virtual cockpit mode)

LEFT **Shift** + **2** NUMPAD or **@**

→ Made the propeller to rotate (For enhanced realism. See next page)

LEFT **Shift** + **3** NUMPAD or **#**

→ Backward displacement of the ladder (see next page)

C) UMMu's specific keys for the DC-6 :

LEFT **Shift** + **N**

→ add a **N**ew crew member to the selected seat.
(If the seat is occupied by an other crew member, the first available seat will be used).

LEFT **Shift** + **A**

→ toggle open / close **A**irlock
(In the case of the DC-6, there is no airlock, but a "sign" shows whether the UMMu can board or not).

LEFT **Shift** + **E**

→ **E**VA the crew member from the selected seat.
(if not empty).

LEFT **Shift** + **C**

→ **C**ycle through seats
(There are 5 seats available inside the DC-6).

D) CARGO's specific keys for the DC-6 :

LEFT **Shift** + **D** → Cycle through cargos on **D**isk

LEFT **Shift** + **L** → **L**oad selected cargo on disk to the selected slot.
(if the selected slot is not empty, the first empty slot found will be used).

LEFT **Shift** + **G** → **G**rapple cargo to the selected slot.
(If the selected slot is not empty, the first empty slot found will be used).

LEFT **Shift** + **R** → **R** Release cargo from selected slot.

LEFT **Shift** + **S** → Cycle through **S**lots
(only one slots is available in this DC-6).

- 4 - DC-6 AIRCRAFT PILOTAGE (HOW TO...)

A) Taxiing

Of course to move forward the **DC-6** you will use the *numpad* **+** key as usual.

But in order to rotate the aircraft, you need to switch the **RCS** in *rotation mode* with **Ctrl** + **/** and use the **1** and **3** *numpad* keys.



Do not use the other keys, otherwise your plane risk of a fatal tumble...

This aircraft also has a "push-back" feature with the **-** *numpad* key.

The rotation of the propellers is controlled by the key which allows moving forward the plane. But in reality, the propellers *do not stop* when the aircraft is "free wheeling"...

So, for enhanced realism, you also have the ability to make the propellers rotating even when the DC-6 is stationary, by using the LEFT **Shift** + **2** (or **2**) keys.

B) Take off

Nothing easier : just press the **+** key on the numeric keypad (with or without **Ctrl**).

When you reach the right speed (about 70 m/s) begin the rotation. When your plane has a confirmed positive rate of climb, retract the landing gear with **G**.

(Warning, this aircraft is like a "wheezing machine": do not be afraid to take a little much more velocity)...

C) Atmospheric flight

You can use the *elevator trim* with the **Insert** and/or **Delete** keys.

If you want to enjoy the *virtual cockpit* press on **F8** and then on LEFT **Shift** + **1** NUMPAD or **1** in order to make the **HUD** and the two **MFDs** to appear (or disappear).

D) Approach and Landing

In addition to the *Trim* and *usual commands* for all vessels in **Orbiter**, you can extend the *flaps* with the LEFT **Shift** + **0** NUMPAD or **0** keys.

Do not forget to expand the landing gear with **G**.

You have the option to brake with the **9** and **0** keys.

E) Return to the Parking

Same as for taxiing.

Once you're on the parking spot, press on **K** which activates the parking brakes and doors opening.



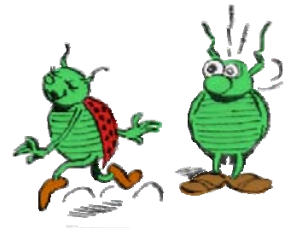
- 5 - EXPLANATION AND DETAILS

A) The K key :

For this aircraft, this command is essential : many animations are activated.

Here is the list :

- Parking brakes enabled
- Installation of the wheel chocks and the support of the tail for the DC-6
- Open the 2 aircraft doors
- The pilot-in-command needs to relax and get out of his head.
- Awakening of the 3 Syldair flight attendants :
 - Yoko at the forward door
 - Natacha at the backward door
 - Gertrude makes go and back in the cabin

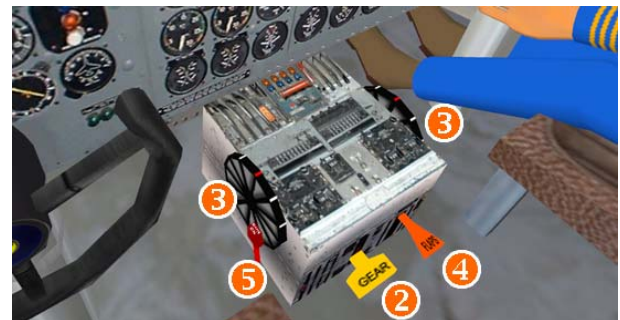


B) The Virtual Cockpit and its indicators:

This cockpit unfortunately has no "clickable" controls but some useful indicators.

Here is the list:

- ① Two **MFDs** and one **HUD** (press on **LEFT Shift + 1** NUMPAD or **1** to make them appear or disappear)
- ② Indicators and controller for the landing gear
- ③ Indicator and a "wheel" for the elevator trim
- ④ Control lever for the flaps
- ⑤ Indicator and control lever for parking brakes



C) Using the Attachment Points:

This DC6 has 3 attachment points provided for boarding Tintin, Snowy and Captain Haddock. To use them, you should install the "Tintin sur la Lune" add-on (Tintin on the Moon) and the R1 patch.

For testing this feature, you can run one of the two scenarios located in the folder

\Tintin on the Moon\0 - DC6 Sprodj destination : 2- DC6 (Prague-terminal) or 8- DC6 (Sprodj-Airport-welcome).



- First, activate the *attachment points function* with **LEFT Ctrl + A**
- Then select the desired attachment point with **LEFT Shift + 6** NUMPAD or **^6**
or else with **LEFT Shift + 4** NUMPAD or **\$4**
- Lastly, attach your character with **LEFT Shift + 0** NUMPAD or **)**

Remark #1 :

You can use for the "number keys" :

- one of the numeric keypad keys (it must be disabled with the indicator "Num Lock" off)
- one on the top of the keyboard (**new** with *Spacecraft 4*).

Remark #2 :

The character which is fixed to the selected point will always be the closest. So you must take this into account, depending on the attachment point whose names appear in the lower left corner of your screen. (If not Snowy may be strangely positioned)...

Attach: TINTIN :<free>

- To detach your character, do the same.
- To disable the *attachment points function*, press again on **LEFT Ctrl + A**.

Remark #3 :

When you "detach" one of the characters from the aircraft, it "falls down" to the ground just below, therefore behind the stairs. You can move back this staircase with the key combination **LEFT Shift + 3** (or **LEFT Shift + #3**)



D) UMMu's compatibility :

Vinka added this new feature for the **Dansteph's UMMus** with his new *Spacecraft4*. 

The use of **UMMus** is as normal.

There is a quick summary of the main controls for the **UMMus** on page 12.

Remark #1 :

In order for an **UMMu** to be able to enter (or exit) into (or from) the **DC-6**, the **airlock** must be open before by using the keys **LEFT Shift + A**.

You can see an *indication* on the rear door of the aircraft to let you know if the **airlock** is **closed** or **open**.



Remark #2 :

To be able to board an **UMMu** into the **DC-6**, it should be sufficiently close to the door. To do this, just position your **UMMu** on this beautiful carpet made in Syldavia ...

Remark #3 :

When your **UMMu** goes out of the plane, it will be dressed with its spacesuit.

This is not very realistic on Sprodj or Prague airport, but that's how.

To change its suit to a more "terrestrial" suit, just press **Shift + X**.



Remark #4 :

Let me remind you that Tintin and Captain Haddock in **UMmu** version are available here :

<http://www.orbithangar.com/searchid.php?ID=6588> for Tintin.

<http://www.orbithangar.com/searchid.php?ID=6667> for Captain Haddock.

E) CARGO's compatibility :

Vinka added this new feature for the **Dansteph's** CARGOs with his new *Spacecraft4*.

There is an example in the *9-DC6+UMmu+Cargo (Habana)* scenario.

The DC-6 can load only one "cargo".

The use of **CARGOs** is as normal.



F) Sounds and Musics :

With this add-on are included 4 little music samples that you will hear from time to time. But this can be boring...

🤖 If you want to "neutralize" them, it is very easy. Here is how to do :

- Edit (with *Windows Notepad*) the **DC-6.ini** file.
This file is located in your ...**\Config\Spacecraft** Orbiter folder.
- Look for the section **[SOUND]** et localize these following 4 lines :
COCKPIT_AMBIENCE_1=Sound\Vessel\Tintin\DC6_ambience1.wav
COCKPIT_AMBIENCE_2=Sound\Vessel\Tintin\DC6_ambience2.wav
COCKPIT_AMBIENCE_3=Sound\Vessel\Tintin\DC6_ambience3.wav
COCKPIT_AMBIENCE_4=Sound\Vessel\Tintin\DC6_ambience4.wav
- Modify these 4 lines like this :
COCKPIT_AMBIENCE_1=Sound\Vessel\Tintin\sound_off
COCKPIT_AMBIENCE_2=Sound\Vessel\Tintin\sound_off
COCKPIT_AMBIENCE_3=Sound\Vessel\Tintin\sound_off
COCKPIT_AMBIENCE_4=Sound\Vessel\Tintin\sound_off

Dummies !...

👤 Here it is : now you will no longer hear the Castafiore ...



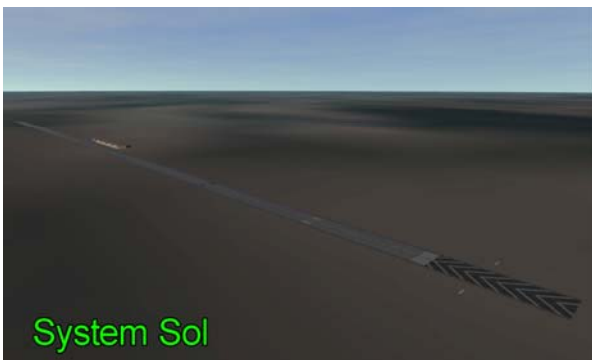
- 6 - PROVIDED AIRFIELDS

With this add-on are also provided two airfields, totally fictional : Prague and Sprodj.

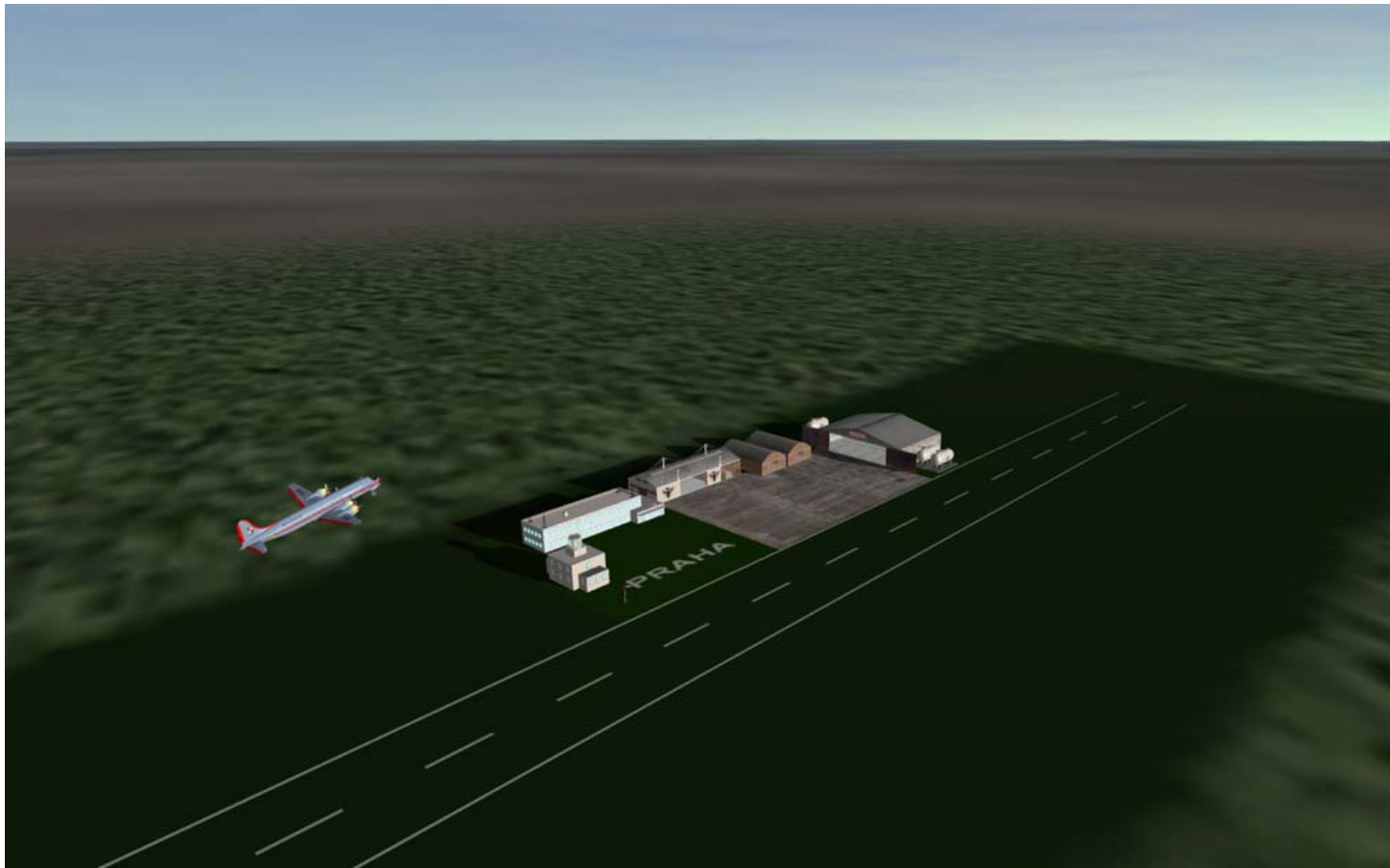
A) SPRODJ :

This is a very simplified version. If you want a more detailed version, just install the add-on "Tintin sur la Lune" (*Tintin on the Moon*).

Then you can (if you want) edit all the scenarios included in the [DC-6 aircraft] folder and modify the line **System Sol** with the line **System Tintin\Soleil**.



This airfield is fictional and supposed to represent the one of **Prague** in **1953**, the year of the publication of *Tintin on the Moon*...



And here are my inspiration sources :



- 7 - SCENARIOS

This add-on adds two scenarios folders :

-  **DC-6 aircraft**
-  Tintin on the Moon  **0 - DC6 Sprodj destination**



- Scenarios of [**DC6 Sprodj destination**] folder require the "*Tintin sur la Lune*" add-on.
- Scenarios of [**DC-6 aircraft**] folder don't require a supplementary add-on (except for the scenario 9- *DC6+UMmu+Cargo (Habana)* which require **UMmu** and **UCGO** by **Dansteph**).

- APPENDIX A -

DC-6 CHARACTERISTICS

The **Douglas DC-6** is an American four-engine airliner built between 1947 and 1959 to 704 units. Its first flight occurred on February 15th, 1946.

This aircraft has 4 crew members and can carry 52 passengers.



In my Orbiter version there are only 2 pilots, 3 hostesses and 48 passengers. Sorry...

- Empty weight = 52,567 lb (23,844 kg) - Length = 30.66m (100ft 7in)
- Max takeoff weight = 97,200 lb (44,100 kg) - Height = 8.66m (28ft 5in)
- Fuel capacity = 4,260 US gal (16,100 l) - Wing span = 35.81m (117ft 6in)
- 4 motors Pratt & Whitney R-2800-CA15 "Double Wasp" radial engine, 2,400 hp (1,800 kW) with water injection each
- Range = 3,983 nmi (7,377 km)
- Cruise speed = 311 mph (501 km/h or 139 m/s)
- Service ceiling = 21,900 ft (6,700 m)
- Rate of climb = 1,070 ft/min (330 m/min = 5.5 m/s)



The DC-6 can maintain a cabin pressure equal to 1,524 meters (5,000 feet) while flying at 6,096 meters (20,000 feet).



A) Control keys used for the DC-6 :

A G J K

Shift and **Ctrl** these are the keys to the left of the keyboard.

1 2 3 and **0** numeric keypad.

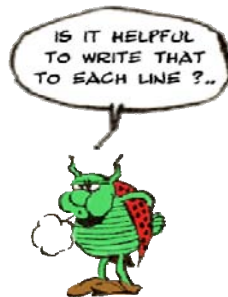
NEW You can use new keys at the top of the keyboard (their function / action is similar to the numeric keypad).

Caution : the keypad should be disabled if you have Windows 7



B) Animations Control keys used for the DC-6 :

K → animation
G → animation
LEFT Shift + 0 → animation
LEFT Shift + 1 → animation
LEFT Shift + 2 → animation
LEFT Shift + 3 → animation



C) attachment points :

As the name suggests, this feature lets you attach an object to another one. With the DC-6, this feature is used to attach Tintin, Snowy, and Captain Haddock on (inside) it.

Here is how to do :

LEFT Ctrl + A → enable/disable the "attachment point" commands.
Note : sometimes you have to do it a second time if it does not work...

You will see this in the lower left corner of your screen :

Attach : specify that you are in "attachment point mode".
POINT_NAME : attachment point name (3 attachment points are available).
<free> : it means that the attachment point is <free>...



If the attachment point is <occupied> you will have this :

Objet_Name : the attachment point name.

And then :

LEFT Shift + 4 or **6** → Selects the desired attachment point.
LEFT Shift + 0 → Attach / Detach the character (from or on the selected point).

When *Attach* or *Detach* operation is completed, do not forget to press again the key combination

LEFT Ctrl + A to deactivate this command.

(The display in the lower right corner of your screen disappears).

E) Payloads :

J

→ Release one object loaded in the aircraft.

(Not to be mistaken with objects "attached" as described in the paragraph "C ")



Summary of commands key used with a "UMmu" character :

- E** → Enter into a vehicle or into a vessel *(and of course in an aircraft like the DC-6).*
(You must be enough close to it).
- U** → Packing (or unpacking) a **UCGO-CARGO**.
- G** → Grapple (or release) an object with his hands *(in front of him) !..*
- B** → Grapple (or release) an object on his back *(beside him) !..*
- Shift + X** → Toggle wearing spacesuit on/off *(spacesuit ↔ coverall).*
- Shift + R** → Change **ummu**'s name, age, and function. *(so, also UMMu's body).*
- V** → Open (or close) the gold filter of his helmet.
- O** → Change **HUD** colour.
- L** → Turns on the helmet light.
- J** → Enable (or disable) auto chute *(it will open automatically).*
- S** → Switch **RCS** in fine mode (keep button pressed).
- N** → Select next target for various HUD mode.
- Enter** → Activate action area if any defined for one vessel. (Ship dependent).
- Ctrl + Enter** → Display information on all action areas available within 15km.
(Useful to know if there is any).
- Alt + X** → Analysis atmosphere to see if it's breathable.
- F10** → Open the permanent breathable area utility. *(must be on ground).*
- H** → Displays help *(cockpit-HUD mode)*
- M** → Switch HUD mode. *(Cockpit-HUD mode mainly gives you information to accurately navigate around objects)).*



[Click here to go to my download page on Orbit Hangar Mods...](#)

[Click here to go to my download page on Dan's Orbiter Page...](#)

I wish you a pleasant flight...



JacquesMomo 2015