

- JACQUES MOMO -

ADD-ON FOR ORBITER

HADDOCK

UMMU VERSION

USER MANUAL



AVERTISSEMENT

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...

Note : All small beetles are © Gotlib.



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I - PROLOGUE

Here is the second character from the series of characters included with my add-on **Tintin sur la Lune** (*Tintin on the Moon*). This is an **UMmu** version of Haddock.

The other characters (and the vehicles) are expected to follow within ...Tuesdays to come...

Of course, to take fully benefit of this character, it is recommended to install the **Tintin sur la Lune** (*Tintin on the Moon*) add-on, but also you can use this character like any other "standard" **UMmu** with your usual vessels (if compatible) as well as all **UCGO** vehicles...

For more detailed information, please consult the documentation provided with the essential add-on from **DanSteph** **UCGO 3.0 + UMmu 3.0**.

*I hope you will have a great time with this new Haddock...
Happy reading and have fun !!!*



JacquesMomo November 2014

II - INSTALLATION

1° ADD-ON INSTALLATION

Simply extract (unzip) the **Haddock-UMmu_v1(en).zip** into the root folder of your **Orbiter**, respecting the path folders.

That's it !..



Note : if you have previously installed my **Tintin sur la Lune** (*Tintin on the Moon*) add-on (What's that... not yet ?!) no previously installed files will be overwritten.

2° OTHER MANDATORY ADD-ONS TO INSTALL

- This add-on requires **UCGO 3.0 + UMmu 3.0** from **DanSteph**

This module is not included in this package, so you **must** install it.

You can find this module at this address :

<http://orbiter.dansteph.com/forum/index.php?page=download>



- Of course you must have the essential **OrbiterSound** from **DanSteph**...
Otherwise you will have no sounds.

Address : <http://orbiter.dansteph.com/index.php?disp=d>



- Some scenarios need **Spacecraft3** from **Vinka**.

Address : <http://users.swing.be/vinka/>



2°/ HIGHLY RECOMMENDED ADD-ON

- As the character of Haddock is part of my add-on **Tintin sur la Lune**, it is obviously highly recommended to install it... but it's up to you...
You can find it at this address: <http://francophone.dansteph.com/?page=addon&id=146>
- And also the other character **Tintin** available as a UMmu : **Tintin-UMmu_v1(en)**.
Here : <http://www.orbithangar.com/searchid.php?ID=6588>



*Some of the scenarios will not work if you don't install this add-on!..
Tintin-UMmu_v1 must be installed **prior** Haddock-UMmu_v1*

Here is the list of available scenarios :

a) Scenarios not requiring the add-on :

- Haddock-UMmu (3 scenarios)
- Haddock + DG-IV (3 scenarios)

b) Scenarios requiring the add-on : **else CTD**

- 11 - Haddock-UMmu+Spacecraft (Syldavia)
- 12 - Haddock-UMmu (Departure from Syldavia T-2mn)
- 13 - Haddock-UMmu (Rescue by Tintin)
- 14 - Haddock-UMmu+Turbopack (Adonis)
- 15 - Haddock-UMmu (going down to the Moon)
- 16 - Haddock-UMmu (Hipparchus)



III - HADDOCK UMMU

Here is how the keys of the keyboard are represented:

The commands described below are for a **QWERTY** keyboard.

Shift key is often the **left key** (with SpaceCraft).

Ctrl key is often the **left key** (with SpaceCraft).

1 to **5** keys refer to the uppers **numeric keys**.

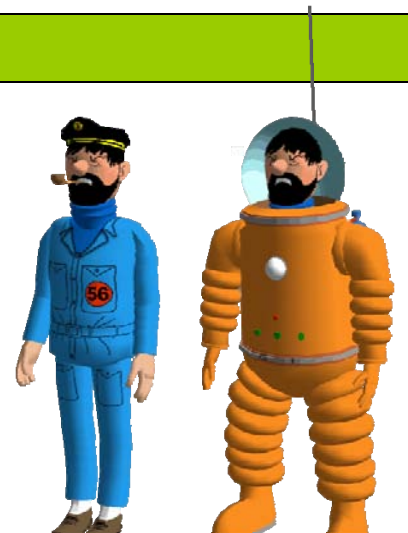
0 to **9** keys refer to the **numeric keypad**.



*I only have specified here a **summary** of commands relative to **UMmu** (and **UCGO**). This will allow those who are not yet accustomed with this module to quickly manage it. But I recommend that you read the excellent documentation supplied with the **Dansteph**'s add-on for more information about general operations of his sublime add-on, as well as the specific control keys.*

1°/ MAIN UMMU'S CONTROLS

So here you are in possession of Haddock **UMmu** version.
It should be noted that this character is apparently identical to his **SpaceCraft** clone version included in the essential add-on "**Tintin sur la Lune**" that I hope you have already installed...



A) Main controls :

- Shift + X** → Toggle wearing spacesuit on/off (*spacesuit ↔ coverall*).
- G** → Grapple an object with hands (in front of him).
- B** → Mount an object on his back (*Turbopack* for example).
(only available when Haddock is wearing his spacesuit).
- J** → Enable or disable auto Chute (*it will open automatically*).
- E** → Enter into a vehicle or into a spaceship.
(You must be enough close to it).
- U** → Packing or unpacking a **UCGO-CARGO**. (if available).
- Shift + R** → Change **UMmu**'s name, age, and function.
(Function change spacesuit and **UMmu**'s face). **Remind this** : type "HAD" to have Haddock.



Remark : There are other controls for **UMmus**. For that, refer to **Appendix A** on page 11.

B) How to move Haddock on ground :

Controls are specific and shared by all the **UMmu** :

- 1** → Translation to his left
- 2** → Translate backward
- 3** → Translation to his right
- 4** → Rotate to his left
- 6** → Rotate to his right
- 8** → Translate forward



Remark : In this case, **/** key has no effect, as well as **0** , **Del** , **+** , and **-** keys.

C) How to move Haddock in space :

It's very easy : as a "standard" spaceship with usual keypad keys.

2°/ HOW TO CREATE a " UMMU - HADDOCK "

a) With a predefined scenario :

So there it is really easy : you just run the appropriate scenario and that's it !

This is the case with the scenarios included with this add-on. You will find them in the following folders :

- *Your_Orbiter\Scenarios\Tintin on the Moon\UMmu version*
- *Your_Orbiter\Scenarios\ UMmu Tintin*

b) With a modified scenario :

Let's take a simple example : *Habana Spaceport.scn*, one of scenarios included with *Orbiter*, and suppose you want to add your **Haddock-ummu** at the same location as the **DG** located in *Habana*.

Edit this *Habana Spaceport.scn* file with Windows *Notepad* and look for the section where the **DG** is.

Here is what you'll see :

```
GL-01S:DG-S
STATUS Landed Earth
BASE Habana:2
HEADING 5
PRPLEVEL 0:0.3 1:1 2:0.3
GEAR 1 1.0
NOSECONE 0 0.0000
NAVFREQ 562 162 50 0
TANKCONFIG 1
PSNGR 1 2
END
```

Now take a scenario with Haddock version **UMmu** (for example scenario **Haddock-UMmu (KSC)**) and find the section where Haddock is :

```
UMmu_HAD-Haddock:UMmu
STATUS Landed Earth
POS -80.6501531 28.5828492
HEADING 177.11
RCSMODE 0
AFCMODE 7
PRPLEVEL 0:1.000000
NAVFREQ 0 0
XPDR 140
O2Level 100.0000
O2MaxLevel 100.0000
CardiacBeat 65.0000
Age 20
HudColor 0
Chute 0
PressureDeath 0
MeshName ummu/UMmuHaddock
crewweight 120.0000
ProjLights 0
END
```

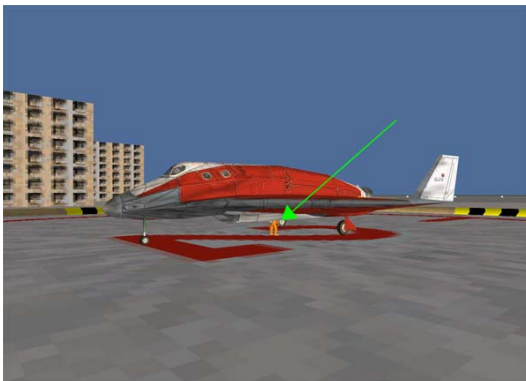
Select this entire section and then copy it to the file, following the DG section. Then replace the location line of Tintin (in red) by the location line of the DG (in green). You will get this :

```
UMmu_HAD-Haddock:UMmu
STATUS Landed Earth
BASE Habana:2
HEADING 177.11
```

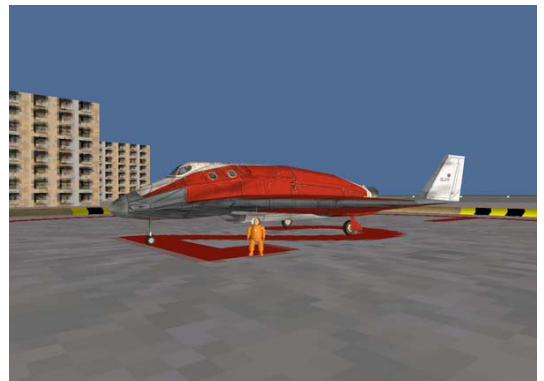
Remark : The position may be declared in 2 different ways (on ground) :

- either with **BASE <name_base> : n** (*n* is the PAD number)
 - or with **POS -xx.xxxxxxx yy.yyyyyyy** (*x* and *y* are the location coordinates)
- The same principle is applicable.

And this is what you will see :



*Haddock's head is inside the DG...
Take his controls with F3, change his location by moving him a little bit, then save your situation.
Now you get a new scenario.*



If your spaceship is in flight or in orbit, its location will be declared by these 4 lines :

```
STATUS Orbiting Earth
ELEMENTS 2238000.0 0.00000 90.000 0.000 0.000 0.000 51544.5
AROT 0.00 0.00 -72.91
VROT 0 0 10
```

The principle is the same as above: Use these 4 lines to define the location of your Haddock-UMmu

Remark : your Haddock-character may be not visible because it may be hidden by the mesh of your spacecraft. Move it a little, and you'll see it appear.

Notice the line **STATUS Orbiting Earth** instead of **STATUS Landed Earth**.
Also the name of the celestial body reference may be different: **Moon** instead of **Earth**.

c) With a different standard UMMu :

Again, let us take a "standard" scenario supplied with the **DanSteph's** add-on.

For example **UMmu performance test**. Select the **ummu** you desire and press **Maj+R** keys.

The following window will pop up :

Enter new crew's name (or escape)

Type the **name** you wish
(Haddock, Momo, DanSteph, etc...),
then **confirm** (enter).

You will then have this :

Enter age

Choose **how old** is your character (7,77,etc...),
then **confirm** (enter).

A new window appears :

Enter function (Capt,Sec,Vip,Sci,Doc,Tech,Crew,Pax)

Type **HAD** , then confirm (enter).



Remark : If you type a name other than "HAD", you will not have Tintin, but another **UMmu** among those who come with the **Dan's** add-on. So watch out for your spelling...

d) By using a UCGO vehicle :

You need to be in control of the vehicle (focus), either in internal view (cockpit) or in external view.

Type the **M** key
(enter).



The following window will pop up :

Type the **name** you wish (Archibald, Momo, DanSteph, etc...), then **confirm**

Enter new crew's name (or escape)

You will then have this:

Choose **how old** is your character (7,77,etc...), then **confirm** (enter).

Enter age

And then a new window appears :

Type **HAD** , then **confirm** (enter).



One more time : if you type a name other than "HAD", you will not have Haddock, but an other **UMmu** among those who come with the **Dan's** add-on. So watch out for your spelling...

Enter function (Capt,Sec,Vip,Sci,Doc,Tech,Crew,Pax)

So it is very important to remember this :

The spelling of the name that you type into the 3^d window "**Enter function**" is crucial.

On the other side, what you write in the windows #1 and #2 can be what you want : Haddock can be called Bob and be 90 years old...



And now, you can have a seated person on the driver's seat... but he is not necessarily Haddock...

In fact, the act of creating a **UMmu** in a **UCGO** vehicle will make a predefined group to appear (i.e. already created in the mesh but hide before)...

Now press the **E** key : And there you are !!!



e) by using a compatible UMMu spacecraft:

Make your UMMu go out (EVA) and do the same maneuver as in paragraph "c".



If you are determined to do the trip from the Earth to the Moon with the Moon Rocket and Haddock (**UMMu** version) inside it, you must take extreme care to this :

- 1) Haddock must wear his spacesuit, otherwise it will die... because the Moon Rocket is not pressurized !!! **SpaceCraft** characters are not affected, but **UMMus** characters yes !!!
- 2) Do not speed up too much the rocket on and after takeoff because UMMus characters can not tolerate high acceleration (in air), which is the case of the Moon Rocket if you apply full thrust. But once arrived in space (no more atmosphere) then you can go ahead with full thrust...


3°/ HADDOCK and theTURBOPACK

This UMMu version of Haddock can use the *DanSteph's "turbopack"*, included in his package...



*It should be noted that the UMMu, to be able to "attach" the turbo-Pack on his back, (and thus use it) must be in "spacesuit" configuration. Type **Maj+X** if he don't.*

How to use Turbopack :

- B** → To attach it on the UMMu-character
- B** → To detach it from the UMMu-character (if it is already attached) (take care not to do it in flight... )
- J** → Enables the parachute.

How to pilot Turbopack :

It is like a spacecraft, with, as usual :

- +** and/or **-** (numeric keypad) → "Main Thrust"
- 0** and/or **Del** (numeric keypad) → "Hover Thrust"
- 7 8 9**
4 5 6
1 2 3 (numeric keypad) → rotation or translation movements
- /** toggles between the two modes

Specific commands for controlling the UMMu - Turbopack :

- D** → Engage the hover autopilot.
0 and/or **Stop** keys (cursor keypad) control ascent/descent rate of the turbo pack.
- C** → Engage the hover auto descent autopilot (allowing for a descent and soft landing).

Remark #1 : If you run out of fuel with the Turbopack, you can use your parachute. (It can save your life !)

Remark #2 : If you turn the engine off then activate the parachute by pressing **J**, it will open. This can be really helpful...



4°/ How to differentiate Haddock "UMmu" with "Tintin-Spacecraft" ?

Easy : when you open the selection window (with **F3**) **UMmu** version is written with **UMmu** on the beginning of the line...

Damn but that is of course !..

Remark : the name of the UMmu-Turbopack does not appear, this is normal.



IV - THE NEW « MOON WALK » ANIMATION

If you do not know yet what we are talking about in this chapter, go and read the **user manual** of the add-on **Tintin sur la Lune (Tintin on the Moon)** at page 4, as you should have understood the principle. But sorry, the translation of this manual is not yet complete...

Haddock, in the comic, does not "jump" from the rocket to the ground of the Moon, but he goes down the ladder of the Moon Rocket, before putting his feet on the ground. So I tried to reproduce his descent as well as possible.

With this new version of Haddock-UMmu, you will have the ability to make the Captain Haddock going down the rocket as Tintin. Now you can find in the list of available vessels (**F3**) this name: "**Support_Haddock**". It is an invisible mesh with a special attachment for Haddock to crate an animation for descending from the Moon rocket.

Its operation is absolutely identical as "Sortie_Lunaire" for Tintin from the original add-on.

Here is a reminder of how it works:

We suppose that Haddock is "attached" to the support **Support_Haddock**.

- Select (with **F3**) "**Support_Haddock**".



Note that it is better for you to set "Ground view" mode as it is more comfortable to observe the scene...



- Then press **1** (or **3**) key and immediately after press **K** key.
(**1** key starts Haddocks' voice, **K** key runs animation for the descent of Haddock from the Moon Rocket).
And enjoy !..
- When Haddock is on the ground (wait for the end of music and Tintin's voice), press **A** then press the combination key **Shift**_{left} + **0**_{Numpad} (you must first **disable** "Ver Num") to unhook Haddock from his animated support.

Now you can take control of Haddock and walk around the landing site of the Moon Rocket...

For Haddock to go back into the Moon Rocket, do as follows :

- **F3** to select **Support_Haddock**.
- **A** then **Shift**_{left} + **0**_{Numpad} to hook Haddock (Do not forget to **disable** "Ver Num")
- **Ctrl** + **K** to start the animation.

The box with its illuminated buttons:

To assist you, you can see on the wall of the airlock a small box with 4 LEDs that will allow you to control the system operation for the descent of Captain Haddock.

This box, to differentiate it from that of Tintin, is dark blue.
(The color of his pullover)...



Here is their function :

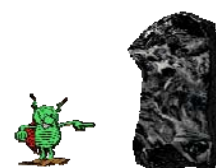
- Indicator No. 1 (red) : Is ON when the support-Haddock is up in the cargo bay. It will turn off when the captain begins his descent.
 - Indicator No. 2 (white) : Flashes as soon as the support-Haddock starts functioning.
 - Indicator No. 3 (yellow) : Flashes when Captain Haddock is on the ground.
 - Indicator No. 4 (green) : Lights at the end of the animation.
- It's ok, you can detach him : press **A** then [**Shift**_{left} + **0**_{Numpad}]

*Have a good
handiwork....*



WARNING :

If you reach a too high speed or acceleration in the atmosphere, your Haddock-Ummu will burn (overheating)...
He cannot tolerate heat...
But no problem in space vacuum...



Haddock after a "wild" launch...

V - CREDITS AND SOFTWARES USED

1°/ ÉPILOGUE



By achieving the **SpaceCraft vs UCGO-UMmu** add-on (with the splendid Renault 4L that any orbinaute must have on his hard drive), I have learned the specifics of **UMmus** created by **DanSteph**. This has given to me the desire to adapt all my Tintin's characters (created in spacecraft version) by transforming them to **UMmu** version.

I have not redesigned the characters, I simply modified and adapted the existing mesh-3D, because recreate it entirely would have taken me a lot of time...

But it is not impossible for me to do it one day, because if the spacesuit is not too bad, I think that the body (without spacesuit) is really not so cute...

I made progress in 3D modeling and I believe I can do now better.

But for now I will simply restrict myself to the adaptation with the existing Tintin characters.

So to be continued... I hope...

You can, if you wish, put your comments or some words on the **Dan's** forum and if you do, I will be pleased... It is my only pay for spending time in designing all these little tricks...



JacquesMomo - November 2014.

2°/ CREDITS






- Haddock's 3D Model..... *JacquesMomo*
- Haddock's Textures..... *JacquesMomo*

3°/ ACKNOWLEDGEMENTS

DanSteph Awesome designer for "must have" modules as *UCGO-CARGO-UMmu*, as well as the essential **OrbiterSound**.
And what about the forum, whose friendliness is exemplary... Thanks to him, and long life to this unique forum!

4°/ SOFTWARES USED

Here are the main softwares I used to make this add-on :

-  Photoshop (©Adobe)..... With its DDS plugging, essential to elaborate all textures.
-  Acrobat Pro (©Adobe)..... Used to publish the user manual as a PDF file.
-  Notepad (©Windows)..... Very useful for editing and for modifying *msh*, *cfg*, *ini* and *scn* files.
-  Microsoft Word (©Microsoft)..... For the writing of the "user manual".
-  Mesh Wizard (©ar81)..... **Essential** : to modify meshes, rename groups, even texturing, etc....

APPENDIX A : UMMU CONTROLS

UMmu's main controls :

- E** → Enter into a vehicle or into a spaceship.
(*You must be enough close to it*).
- U** → Packing or unpacking a **UCGO - CARGO**. (if available).
- G** → Grapple an object with hands (in front of him)..- B** → Mount an object on his back (*Turbopack* for example).
- Shift + X** → Toggle wearing spacesuit on/off (*spacesuit ↔ coverall*).
- Shift + R** → Change **UMmu**'s name, age, and function. (*so, also UMmu's face*)
- V** → Open/Close the gold filter of the helmet.
- O** → Change HUD color.
- 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
- ←** → Activate action area if any defined for one vessel. (Ship dependent).
- Ctrl + ←** → 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 (*good idea before switching spacesuit*).
- 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 give you information to accurately navigate around objects*)

With the TURBOPACK attached on the back of the UMmu :

- +** and/or **-** (numeric keypad) → "Main Thrust" (*thrust forwards or rearwards*).
- 0** and/or **Del** (numeric keypad) → "Hover Thrust" (*thrust upwards*).
- /** → Toggle between *rotation* and *translation* modes
- 7 8 9**
4 5 6
1 2 3 → RCS Thrust

But there are also *specific* control keys :

- D** → Engage the hover autopilot.
Remark : **0** and/or **Del** keys (cursor keypad) control ascent/descent rate of the turbo pack.
- C** → Engage the hover auto descent autopilot allowing a soft descent and landing...
- J** → Enable parachute.



APPENDIX B : ABOUT VULNERABILITY OF UMMUS

If you try to make the trip Earth to Moon (and back) with this **Haddock-UMmu**, you'll encounter a number of new problems, which will turn you into a real nightmare challenge...

Because, regarding **SpaceCraft** characters, the **UMmus** characters are more delicate ! They are breathing, they do not support heat and impacts ...

Here is what you can expect :

- During launching from the Earth ground, you will burn.
- If you avoid the carbonization, you will reach the Moon dead and cold due to lack of oxygen.
- If you succeed still alive, by jumping from the rocket, the impact on the ground of the Moon will be deadly.
- And even if you can prevent the worst, including once again death by asphyxia, when you come back to the Earth you will again burn, then crush you on landing, and finally die by jumping for the last time from the Moon Rocket...

Calculus did not anticipate that...



So how can we do?

The easiest way is to make the trip with Haddock-**SpaceCraft**, and only use Haddock-**UMmu** just for fun by using intermediate scenarios. But if you still want to make the trip at risk, following are few options to make this trip practicable...

A) Against carbonizing :

- On takeoff from the Earth, it is reasonably easy : Do not push too much on the throttle still you are in the atmosphere. But once you are in space vacuum, you can go ahead and set main thrust to the maximum.
- When landing on Earth, take care to not overheat. *(If you succeed you'll get my respect)...*



B) Against asphyxia :

This problem is the easiest to resolve. Two solutions are possible :



- Set the level of oxygen as unlimited : I found by chance how to cheat ! Edit the scenario that you are going to use, and search in the section **UMmu_HAD-Haddock:UMmu (...)** END the parameter **CardiacBeat** and set it with a value between **0.0001** and **29.9999** (example = **10.0000**). Your **UMmu** will no longer have breathing problem...
- Calculate the O² reserves adequate for the round trip, and for the stay on the Moon. Therefore, always in the same file and in the same section, search for lines **O2Level** and **O2MaxLevel** and then replace their values (which are 100.0000) with a higher value. You will have to search, but why not ?...

C) Against a deadly impact:

- When landing, take care to not exceed a speed of 3 to 5 m/s maximum for ground contact.
- And for descending from the rocket, use my animation with *"Support_Haddock"* because if you jump direct from the rocket, the **UMmu** will not withstand the 20 meters fall... even on the Moon.

APPENDIX C : SCENARIOS (OR SITUATIONS)

You can find included with this add-on some new scenarios.
They are all located in these 2 folders :

-  <your_Orbiter >\Scenarios\ **UMmu Tintin**
-  <your_Orbiter >\Scenarios\Tintin on the Moon\ **UMmu version**

Note : all of these scenarios are "test" scenarios...

A) Scenarios located in **UMmu Tintin**

These scenarios do not require **Tintin sur la Lune** add-on.



- Haddock-UMmu (KSC)
- Haddock-UMmu+Turbopack (KSC)

For these 2 scenarios (as well as the 2 followings), Haddock is located at Cape Canaveral.

- Haddock+ DG-IV
- Haddock+ DG-IV (out)
- Haddock+ DG-IV (EVA)

*For these 3 scenarios, **DanSteph's DeltaGliderIV-3** add-on must be installed.*
<http://orbiter.dansteph.com/forum/index.php?page=download>

B) Scenarios located in **Tintin on the Moon UMmu version**

*These scenarios require **Tintin sur la Lune** add-on... else **CTD !!!***

*Remember that you have to install **Tintin-UMmu** before **Haddock-UMmu**.*

- 11 - Haddock-UMmu + Spacecraft (Syldavia)
- 12 - Haddock-UMmu (Departure from Syldavia T-2mn)
- 13 - Haddock-UMmu (Rescue by Tintin)
- 14 - Haddock-UMmu + Turbopack (Adonis)
- 15 - Haddock-UMmu (going down to the Moon)
- 16 - Haddock-UMmu (Hipparchus)

I hope you to enjoy...

JACQUESMOMO November 2014



JACQUESMOMO'S ADD-ONS

click on the addon's name to go to the site

Vessels and Rockets

EUROPA PROGRAM

TINTIN SUR LA LUNE (Tintin on the Moon)

MISSION GAÏA (with Papyref)

SPACECRAFT vs UCGO-UMMU

CHANDRA-X telescope and I.U.S

TINTIN (UMmu version)

Enhancements

PATCH for GEMINI PROJET

Bases (with Mustard and Papyref)

Kourou CSG global - parts 1 & 2

GO EVERY THUESDAY
AT « DANSTEPH.COM »

