



Hidden Figures - Friendship 7



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Summary

Portraits of NASA mathematicians Dorothy Vaughan, Mary Jackson and Katherine Johnson in bas relief on the Friendship 7...

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Portraits of NASA mathematicians Dorothy Vaughan, Mary Jackson and Katherine Johnson in bas relief on the Friendship 7 capsule. The story of these African-American women's pivotal role in the first orbit of the Earth by an American is told in the book and movie Hidden Figures.

The model is easily recognizable as a space capsule but only when it is lit from inside do these 'hidden figures' fully reveal themselves. This model symbolizes the invisible but vital contribution African-American women made to the early space program.

There are three version of this model.

v1 One piece model of Friendship 7 with portraits in bas relief on exterior.

v2 Two piece model of Friendship 7 with portraits in bas relief on exterior.

v3 Two piece model of Friendship 7 with portraits engraved from interior.

The appearance of the portraits with backlight (lithophane) depends on a variety of factors including scale factor, slicing settings, filament opacity and light source. Experimentation and test prints are required. These models are suitable for remixing for a variety of projects. Example photos are from the v2 model scaled at 60% for use as a nightlight.

Visit my blog <http://DesignMakeTeach.com> for more great designs and articles about 3D printing and making in the classroom. Or contact me on Twitter @DesignMakeTeach

Thanks

Invaluable technical assistance was provided by @HoneyPoint3D <https://www.honeypoint3d.com/> and @CentralScience <http://www.thingiverse.com/contentbydesign/about>

This model would not have been possible without the conversion of the NASA Friendship 7 3D model to STL by my good friend @Zheng3_Jim <http://zheng3.com/>

Sources & References

Sources:

Friendship 7 Model <https://nasa3d.arc.nasa.gov/detail/friendship-c2>

Dorothy Vaughan Portrait: https://www.nasa.gov/sites/default/files/styles/side_image/public/thumbnails/image/youngdorothyvaughan.jpeg?itok=sWS3yi_

Mary Jackson Portrait: https://www.nasa.gov/sites/default/files/thumbnails/image/lrc-1977-b701_p-04106_0.jpg

Katherine Johnson: <https://www.nasa.gov/sites/default/files/thumbnails/image/johnsonk.jpg>

Reference: <https://www.nasa.gov/modernfigures> and https://www.nasa.gov/mission_pages/mercury/missions/friendship7.html

Category: Sculptures

Model files



v2hiddenfigurefriendship7top.stl



v3hiddenfiguresfriendship7bottom.stl



v1hiddenfigurefriendship7_1piece.stl



v3hiddenfiguresfriendship7top.stl



v2hiddenfiguresfriendship7bottom.stl

[Find source .stl files on Thingiverse.com](#)

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