

The Publication for LEGO® Enthusiasts of All Ages!

# Brick Journal 50

Empowering LEGO® Builders Since 2007

people • building • community

***A Celebration of LEGO®!***



***Looking Back and Ahead with the LEGO® Group!***

***Reflecting on Over a Decade of Publishing!***



***Top Builders, Instructions & more!***

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### About the Cover:

We celebrate BrickJournal's 50th issue!  
Photo by Joe Meno.

### About the Title Page:

A shot of Lorinean.  
Photo by Fraser Ratzlaff.

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### Glossary

AFOL (Adult Fan of LEGO)

AFFOL (Adult Female Fan of LEGO)

TFFOL (Teen Female Fan of LEGO)

NLSO (Non-LEGO Significant Other)

MOC (My Own Creation)

TLG (The LEGO Group)

BURP (Big Ugly Rock Piece)

LURP (Little Ugly Rock Piece)

POOP (Pieces—that can be or should be made—Of Other Pieces)

SNOT (Studs Not on Top)

LUG (LEGO Users Group)

LTC (LEGO Train Club)

MECHA (a large armored robot on legs, typically controlled by a pilot seated inside)

MECH (a large piloted combat robot)

DARK AGES (usually teen years, when you drift away from building)

STUDS OUT (building where the studs on bricks face the viewer)

### BrickJournal 50: A Celebration of LEGO®

(BrickJournal #50)

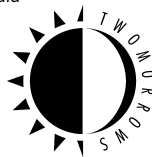
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# Megan Rothrock: First LEGO Editor/ European Bureau Editor, now LEGO Adventurer!

Article and Photos by Megan Rothrock  
Art provided by No Starch Press.

One of Megan's  
early creations,  
the Podagons.  
His name is  
Vergirak.



## An Active AFOL Online

My first appearance in *BrickJournal* was when I was interviewed for the AFFOLs (Adult Female Fans of LEGO) section of the magazine by Mel Caddick (the then European Bureau Editor of the magazine). This was *BrickJournal* #6 (the online version before print, in 2006). After being interviewed, Joe Meno and I began to communicate more, and it turned out that we were both “Journalism Geeks” and enjoyed interviewing and exploring the Adult LEGO Fan Community.

Our LEGO Community was a lot smaller then. I was active sharing and getting to know fellow LEGO Enthusiasts via LUGNet, ClassicSpace.com, ClassicCastle.com, and of course my ‘megs’ account on Brickshelf. We had no Flickr, MOCpages, Brothers Brick, or BrickNerd, just some “Old School” methods of sharing our work.

## First Event: Into a Live LEGOWorld

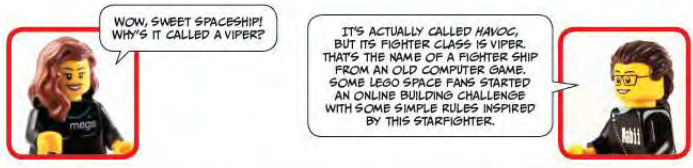
I have to, of course, give credit to Mark Stafford (LEGO nabii on Flickr and later Senior Product Designer for The LEGO Group) for inviting me to build with him, and bringing me to my first LEGOWorld event back in 2003. For me, LEGO was then just a hobby which I enjoyed very much. I could have never imagined the amazing LEGO Adventure that would unfold over the years.

That first LEGO event for me was a profound experience: We had more than 30,000 visitors. Being expatriates, Mark and I were taken in by De Bouwsteen (the Dutch LEGO Users Group) and treated like family. Paul Wolters and his event team were so warm and welcoming. Discovering I could speak Dutch, they asked if I could volunteer, and I was happy to help—both in the event hall and presenting Mark’s Castle Model to all of the Visitors. I also couldn’t help but notice a huge crowd around a table nearby and a gentleman presenting a brilliant transforming LEGO Model, from Jet to Robot—this was built by Nathanael Kuipers, who would also go on to design for LEGO.

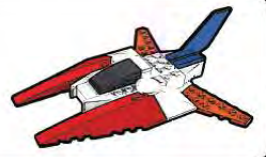
## Feature Editor Beginnings

Later, Joe asked if I would like to contribute more to *BrickJournal* starting with the AFFOL feature, as Mel’s plans were changing. Based in Europe, I could cover European LEGO events and help grow content. Enthusiastic, I dug in and began attending and displaying my LEGO models at more LEGO events all around Europe. Meeting so many talented LEGO builders from all over, learning more about them and featuring them in *BrickJournal*, was brilliant. Events would have AFOLs from all over. I recall the LEGOWorld where Tim Courtney (USA) attended, promoting his LDraw Book and introducing me to the world of virtual LEGO building (cheers, Tim!). Another time I shared a MOC table with Jason Railton (UK’s “JoeFish”) who had talked Peter Reid and Yvonne into joining with him (LEGO Ideas: Exo-Suit); after that event we were all friends, and still are to this day.

Interviewing so many AFOLs, I began to create quite a library of content for articles and features—my poor hard drive was beginning to melt!



- A LEGO Viper should have...**
- two forward prongs
  - a one-person cockpit
  - two rear wings
  - one vertical tail fin
- The rest of the build is entirely up to you.



## Viper Inspiration



HERE ARE JUST A FEW OF MY VIPERS. YOU SHOULD SEE MY SPACEPORT!



A LEGO Adventure spread (from Book 2) featuring the work of Mark Stafford.



Another Podagon - Phery!

## Billund Bound

It wasn't too long after my feature that Mark and I moved from Holland to LEGO's Headquarters in Billund, Denmark. New to town (before I was hired as a LEGO Product Designer), I began to explore. Not speaking any Danish, I tried Dutch and broken German with some English and somehow, I could have a dialogue with the Danes. The Village, as I discovered, was all about LEGO. While out walking my dog Bandit or shopping, I would meet LEGO Retirees and they'd share stories about their time and contribution with TLG. I found all of this to be quite fascinating! I felt it was a shame these stories should stop with me; they should be shared for others to enjoy. I approached Joe about creating an ongoing feature revolving around the history and people who had helped grow the LEGO Group over the years. He thought that was great, and appointed me the European Bureau Editor (as Mel had stepped down to also join LEGO).

## A Chance Meeting of a LEGO Legend

Attending the 75<sup>th</sup> Anniversary Party, I met Mr. Daniel August Krentz, who you may know as the LEGO Designer of the coveted set 375 Yellow Castle (1978). It turns out that while Daniel was actually from the USA, he decided to retire in Billund. I wrote a full article on him for our *BrickJournal* Castle print issue #8, now sold out.

## Working in LEGO History

I began to also be invited by the team at LEGO's own Private Museum, The LEGO Idea House. Working with Jette Orduna and her team, I was plunged further into the

# Lorinean: A LEGO Castle in the Sky!

Article by Joe Meno

Fraser Ratzlaff works for the non-profit organization Children of the Nations, leading teams to Africa to work with orphan and destitute children. Empowering kids to become the next generation of leaders in their communities, he also does advocacy work in Seattle—volunteer events, public speaking, meeting with donors, and fundraising. Basically, Fraser helps get people involved, and he loves his job. He also loves to build. *BrickJournal* talked to him about his latest creation, *Lorinean*.

Fraser has been building since he was 5 or 6 years old. He had other toys growing up, but nothing captured his imagination like LEGO. When asked about his LEGO hobby, he answers, "It was all I asked for every birthday and Christmas. I did take a break from building in college, but then got back into it as an adult after reading Jonathan Bender's book *LEGO: A Love Story*. I had no idea there was a whole community of adult builders before that."

Fraser's favorite theme is Castle. However, one of the suggestions in Jonathan's book was to, as Fraser notes, "push yourself by building things you normally wouldn't." He continues, "I did a big art sculpture piece that I ended up loving. I tried making brick-built streets to go with the modular town buildings. And





*One side of the castle has a skyship dock.*



*A view of the castle towers.*

*Another view.*

I made a jungle scene. It definitely helped me grow as a builder.”

He also enjoys making space and town creations, having built a neighborhood post office modular building and a space station a few years ago. Still, he has always been attracted to castles—real ones and LEGO castles. For Fraser, they are just cool.

*Lorinean* was built as a return to his favorite theme. After building some other large-scale creations, he wanted to build a castle, but not another *typical* castle since there are so many of those built already. Fraser wanted to do something new. He also knew that he had to up his game after seeing some incredible castles on the Brothers Brick blog.

What inspired him was a base he built for his large art sculpture piece that turned out really well. While taking the art piece apart, he thought the base would make a great foundation for a fantasy castle in the clouds. That excited him because he could eliminate building a moat, and the fortress would still have a formidable natural barrier: The sky.

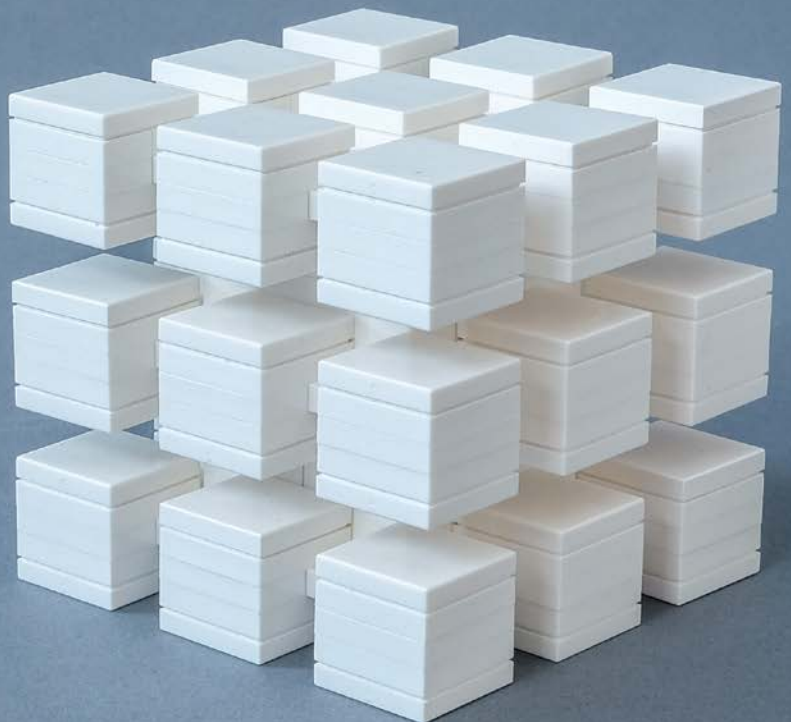
One he got started, he took inspiration from John Bunyan’s *The*





# Monochrome Building in White!

*Article by Joe Meno*





Christian Lintan, a Digital Media Coordinator at Burman University in Alberta, Canada is a builder that works in a unique way. Unlike the majority of LEGO builders, Christian creates using only one color: white. Monochromatic building forces the builder to use form to make a recognizable model, which is a challenge in itself—but with LEGO elements, there are also parts that appear only in certain colors. Christian's creations are extraordinary in this context. He spoke to *BrickJournal* about his creations.

**BrickJournal:** *How long have you been building?*

**Christian Lintan:** I grew up playing with LEGO almost my entire childhood. Unfortunately, new interests started picking up for me and I stopped somewhere around 13 or 14 years of age. I didn't get back into building with LEGO until the beginning of 2016.

*Previous page: A sampling of Christian's work.*

*Below: A microcity.*



## Building



# Cornerstone Brick Designs: Building *Kingsman: The Golden Circle*

*Article by Bruce B. Heller and Joe Meno  
Photography by Bruce B. Heller*

Bruce B. Heller came on the LEGO scene last year by recreating art deco buildings in Los Angeles at microscale. From there, he began to direct his energies toward building as a profession. One of the projects he did late last year was some models to promote the movie *Kingsman: The Golden Circle*. *BrickJournal* talked to him about his experience in creating and building Eggsy's cab and the Kingsman Tailorshop.

Bruce built these models for a friend and started back in early July of 2017, months before the film came out. His goal was to complete them well before the release of the film on September 22nd. He worked on both models concurrently, and finished them both by the first week of September. So, all told, they took two months. Since the film hadn't been released yet, Bruce had close to *no* reference material for the film. All he had was what was shown in the first official trailer. Fortunately, the requested models were both things that existed in real life: Eggsy's cab design is that of a standard London Cab, and the filming location of the Kingsman Tailorshop is an actual London tailor called "Huntsman." Scouring the internet for reference for the cab, Bruce also referred to the first film, as the cab appears a few times in it as well. The submersible feature was only introduced in the sequel, so he had to glean what he could from screen grabs from the new trailer. As it happens, it looked pretty close to how it did in the film!



## Building Eggsy's Cab

He continues, "By far, the cab was the hardest thing I've ever built. In fact, I had never built a car before, and they were among my least favorite sets to buy! But when someone asks you if you can build something, you don't say no. I said 'Oh sure! No problem!' and then promptly had a month-long anxiety attack. After the designs were done and approved, I started to relax a bit more."

To do this, Bruce first went out and bought all the LEGO Expert cars that weren't retired, and built them. From them he started to get a sense of the logic of their construction, and then he dove in and started building the cab. Using reference material to get the proportions right, Bruce started doing springboard models of the parts of the car that make it look like *the* London Taxi: Things like the front grille, the front fender, headlights and fog-lights, and the car's profile. He didn't design it digitally; he did it all by hand first, in random colors. The images Bruce sent to his friend (to get her approval to keep going) weren't even of the whole cab. Through some clever camera angles, he was able to get away with doing just over one-half of the cab to get the approval. Then Bruce created a digital file of the model so he could start to shop for parts.

The biggest challenge of the cab was making the transforming feature work. Bruce went through several prototypes before settling on what worked. He needed to figure out how to make the wheels do two things: Extend from the chassis, and then swivel into place. For the swiveling action, he used a Technic clicking ball joint. To extend the wheel assemblies that had the ball joints on them was another matter. The assembly (which included





## Buildin' and Dreamin'

Article by Joe Meno  
Photography by Joe Meno and Davin White

One of the best creations at Bricks by the Bay 2017 was *California Dreamin'*, a layout that was built and named for the event's theme. It's a minifigure-scale amusement park ride depicting the various attractions in the Golden State, and is more than a train layout. Functions are activated when the cars drive by, and other areas are lit and have movement. Every part of the layout is a vignette, from the mountainside that has a door hiding a bear inside, to the backstage area with wardrobe and guardrail at the rear. The layout is a great example of a multitude of different settings and builds, creating a story for the viewer to see and experience. As a result, the layout requires more than



a casual look—it can easily take an hour or more going through its details.

The layout was built by Flynn DeMarco and Richard Board, two builders who hit the scene online with other smaller builds. While their individual efforts got them on LEGO fan websites, *California Dreamin'* won the Best of Show award, as well as three other awards at Bricks by the Bay, which is a good indicator of the talent and skill used in the model. Both of them talked to *BrickJournal* about themselves and their build.

Flynn DeMarco and Richard Board are both show folk. Flynn is an actor and a director who also decorates specialty cakes. Richard is a theatrical lighting designer who has worked with dance, multimedia performances, film, and video. They started building together and are rather new on the scene, with only a couple of years of building experience when they started *California Dreamin'*.

They started building at the same time Flynn picked up an X-Men set. He was really into the X-Men in high school, and both enjoyed building the set together. So Flynn



## Building Project: **Animation Station**

One of the many interests I have besides LEGO building is Disney animation—well, actually Disney in general. My hobby started when I worked for the Disney Store and later Walt Disney World. From there, I learned about the company and the person who started the entire empire, Walt Disney. I quickly learned and started collecting various items from the company.

Disney's animation is one of the things that I enjoy collecting. For an ongoing project, I have been working on LEGO versions of classic characters and rides. I have displayed some of these at events, but for the most part, the project is for a book I was asked to do about Disney LEGO.

The idea of building an animation desk and station didn't come as an immediate idea. In fact, it's been one of my latest ideas. I really didn't consider going beyond the characters and rides until I happened upon a post on Facebook showing an animation desk that was put up for sale on eBay. That one photo led me on a project that took me a couple of months to build. And here, I'm going to show you what I did to research the model.

*Article by  
Joe Meno*



## From a sales photo...

Here is the photo of the animation desk that I saw. I downloaded it and quickly noticed that it was perfect to build in LEGO—it was simple in shape, and would be a nice display.

Initially, I just worked on the desk, but it became apparent to me that I would need a little more of an environment to fit the desk in. As a result, I had to search for animation spaces online. Fortunately, there were more than enough photos to plan a layout.

## to a render...

At this point, the desk was already built, and I was trying to figure out what I wanted to add to the layout to make it come to life.

I really wanted the space of the animation station to look like it was being used. Boards were put on the walls with storyboards and sketches haphazardly tacked on, and the desk would have books and notes.

There were other props that I would have to add to give it more realism. The desk needed a chair and a lamp, for starters.



**Built to Travel**

# The Never-Ending GBC

*Article and Photography by Geoff Gray*

The “Infernal Machine,” a Great Ball Contraption device, has been under construction for almost four years, and has been redesigned and rebuilt several times. It has been displayed in Charlotte, NC and in Manhattan, NY. The current version is the third major layout and will hopefully make a public appearance in 2018 somewhere on the East Coast. Anytime I show this (or any large MOC) to friends, family or the crowd at a convention, the two questions I get asked the most are:

“How long did it take to build?”

“How did you transport it?”

In this article, I will strive to answer those questions, and many more. I suspect that the story I am about to share is very similar to many of the stories other AFOLs have to share. I also believe that the journey is just as important as the final destination. But then again, with this particular MOC, I have changed and added to it so many times (and continue to have more ideas), I do not think there ever will be a “final destination.” I think this GBC will truly be “never-ending.”

To learn more about Great Ball Contraptions, you can visit  
[http://greatballcontraption.com/wiki/Main\\_Page](http://greatballcontraption.com/wiki/Main_Page)



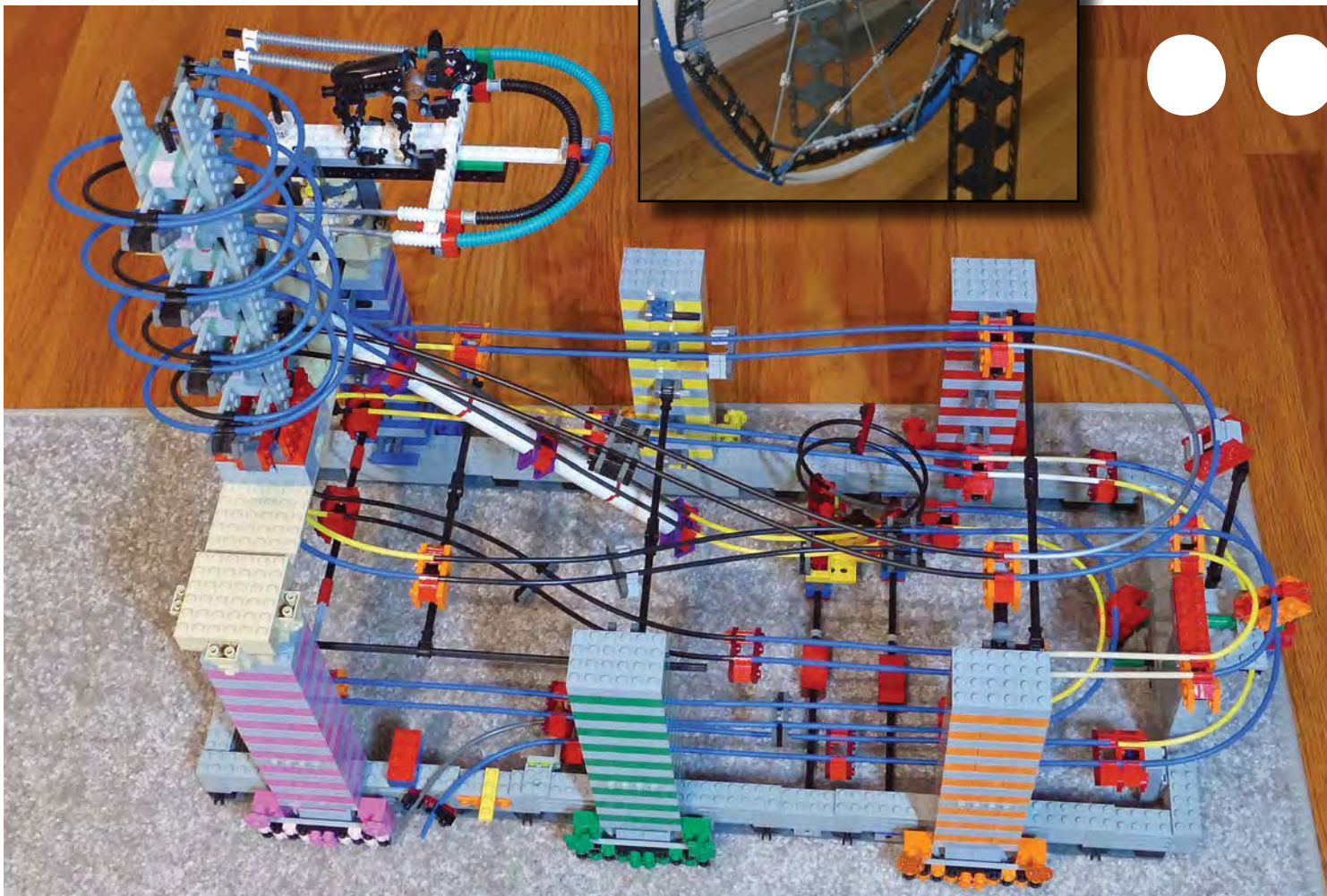
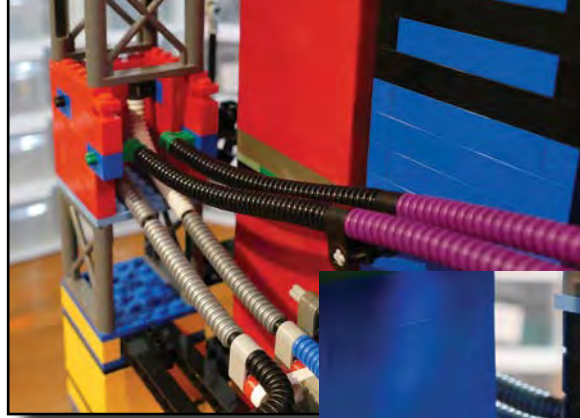




## Version 3, or is it Version 28?

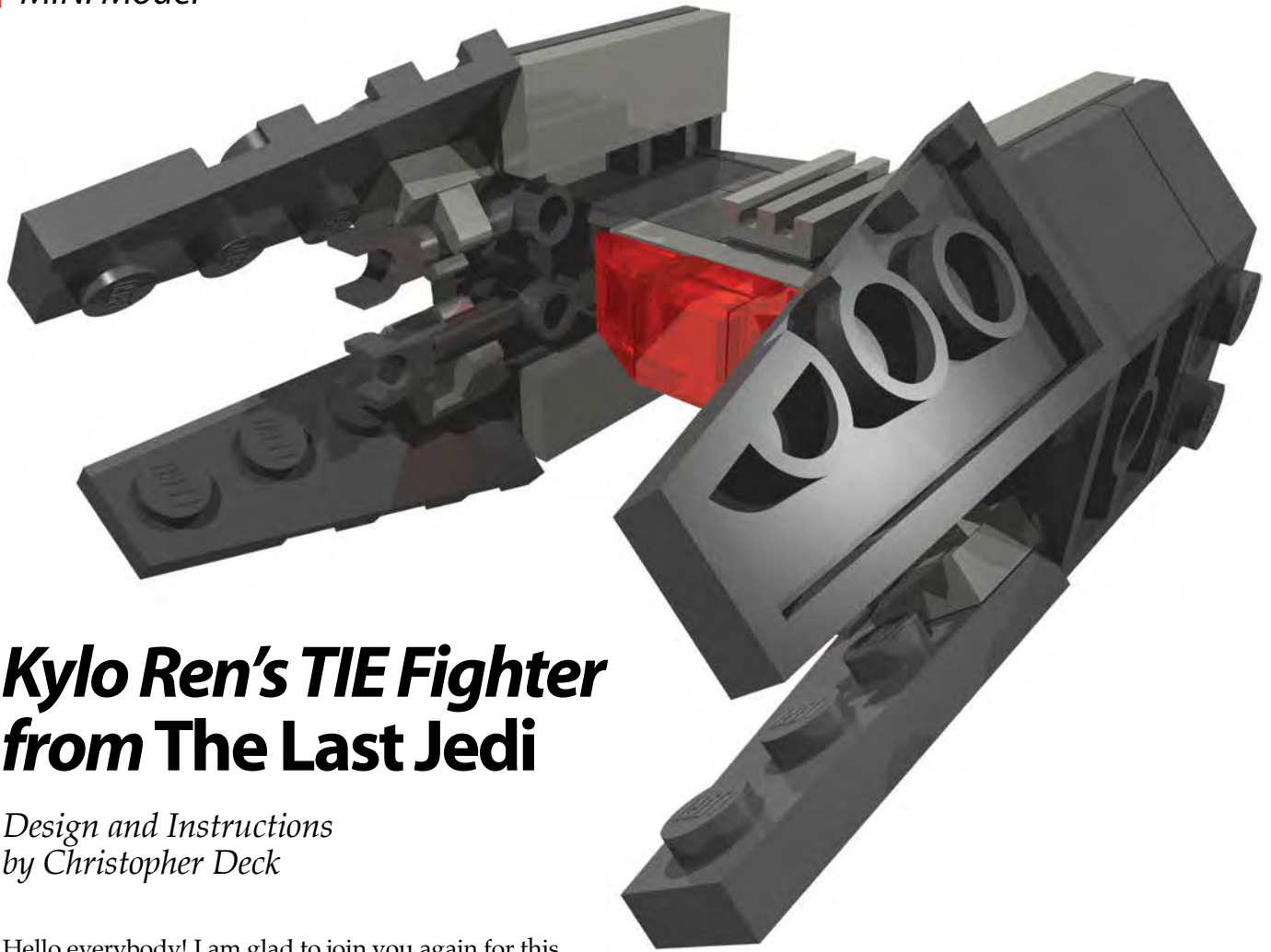
By the beginning of 2017, I had successfully attached the ferris wheel and was busy adding roller coaster track. I went through several iterations of that work until I finally settled on a setup with two tracks: One with a full vertical loop, and the other with lots of back-and-forth after spinning around a series of tight circles. I felt like I was making really good progress.

Now that I had these major components, I needed to figure out how to have them interconnected. I wanted to use flex tubing like I had in the second version, but I wanted it to be inside the cage, so I started playing with how to run flex-tube through 6x6 braces made from LEGO scaffolding pieces. This led to a reworking of the cage, which led to a rebuild of the foundation, which led to a rework of the entire system again (do you see a pattern here?). By this point my wife was starting to worry about the amount of time I was spending on the project. Every time I seemed close, I would essentially start over and build something that looked almost identical, but had just a slight variation. In my defense, each rebuild had a purpose. The system is much more modular now, and the towers themselves are built in sections such that I can add a third level to the towers without making any change to the system, although then the balls will fall quite a way to get to the bin that catches them when they come out of the towers. Also, the colors are more aesthetic. When I started this beast, I was more concerned with prototyping, so I often had a mish-mash of colors. For this build, I tried to be more consistent with the coloring.



# You Can Build It

MINI Model




## Kylo Ren's TIE Fighter from The Last Jedi

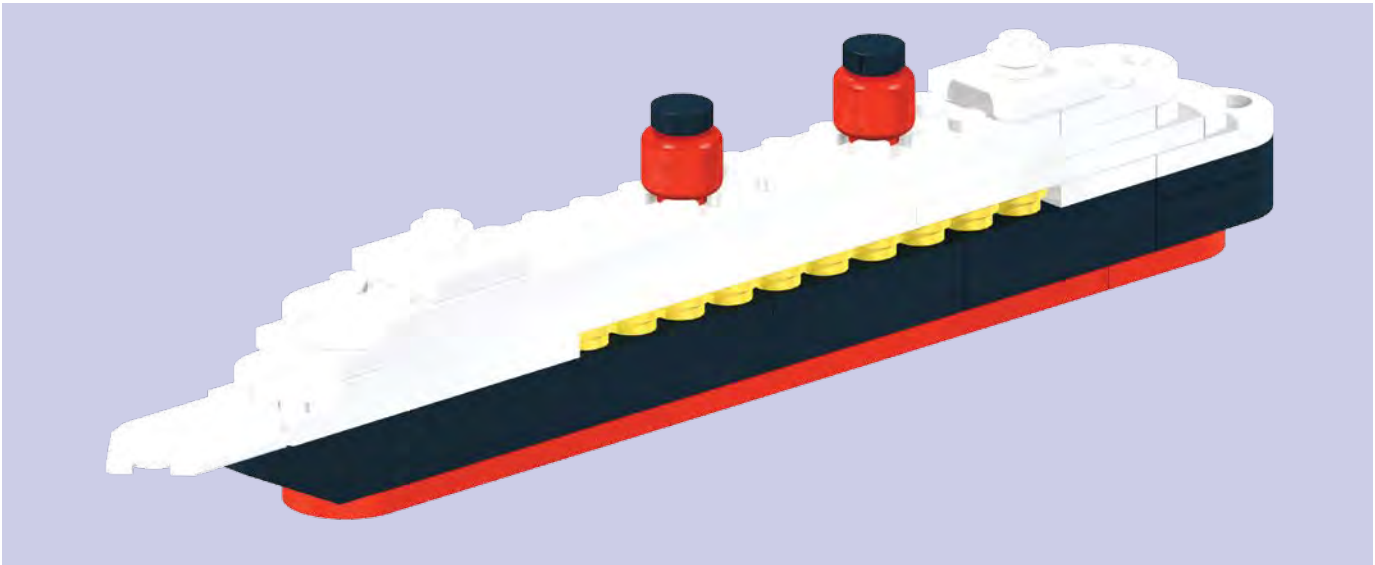
*Design and Instructions  
by Christopher Deck*

Hello everybody! I am glad to join you again for this 50th issue of *BrickJournal*. These are exciting times! There have been so many new *Star Wars* movies during the last months and years, with so many interesting vehicles and vessels. I am glad to have a chance to continue keeping up with all these. In the last issue we built the Resistance Bomber together, and thus we will build a ship from the opposite here! The TIE Fighters' legendary build-up in all its variations goes through the entire *Star Wars* saga like the iconic dagger-shaped warships of the Empire. An imperial super villain of course needs his own unique TIE fighter, such as Darth Vader's TIE Advanced prototype. In the new movie, *Episode VIII: The Last Jedi*, Kylo Ren flies his own brand new TIE Silencer which we want to build here.

Although there are dozens of different TIE Fighters, they all have several features in common. In most cases it's some sort of small cockpit globe with solar panels of variable style around it. That doesn't mean TIE fighters are boring. There are so many different shape

combinations—you simply have to build them all! In this case the cockpit globe has a wide red glass which is special. The solar panels are kind of a mixture between TIE bomber for the rear and TIE Interceptor for the front section of them. Although it's just a tiny model, we need a SNOT inversion technique to attach the rear parts of the solar panels. The relatively new 2x4 triple wedge piece (part number 47759) is actually attached on the main body, and not on the solar panel sub model. It works out pretty nicely, as you will see!

I hope you will add this little model to your growing TIE Fighter fleet. Have fun building and see you next time! 



# Disney Wonder

*Design and Instructions  
by Tommy Williamson*

## About this issue's model:

If you've never taken a Disney cruise, you're missing out. It's got all the fun of cruising with the guest experience you'd expect from Disney, plus that extra Disney magic. There's also something called a "fish extender." You see, there's a little fish emblem outside every stateroom where you can find documents left for you (dinner reservations, notifications, etc.) and people make little decorative pockets they hang on them. Before you cruise, you opt into a group and exchange gifts with other passengers. For the last couple cruises we've taken, my wife and I have given away these as little custom-made sets. Now you can build your own; enjoy! 📺

*Tommy's custom set packaged for a cruise!*



## Parts List (Parts can be ordered through [Bricklink.com](http://Bricklink.com) by searching by part number and color)

Qty	Part	Color	Description
2	2445.dat	White	Plate 2 x 12
1	3022.dat	White	Plate 2 x 2
1	3069b.dat	White	Tile 1 x 2 with Groove
3	3176.dat	White	Plate 3 x 2 with Hole
2	3795.dat	White	Plate 2 x 6
2	6141.dat	White	Plate 1 x 1 Round
1	4282.dat	White	Plate 2 x 16
1	22385.dat	White	Tile 3 x 2 with Angled End
6	25269.dat	White	Tile 1 x 1 Corner Round
2	87580.dat	White	Plate 2 x 2 with Groove with 1 Centre Stud
1	3021.dat	Red	Plate 2 x 3
2	3176.dat	Red	Plate 3 x 2 with Hole
2	3626b.dat	Red	Minifig Head with Hollow Stud
1	3832.dat	Red	Plate 2 x 10
20	6141.dat	Yellow	Plate 1 x 1 Round
4	3001.dat	Black	Brick 2 x 4
3	3176.dat	Black	Plate 3 x 2 with Hole
1	3747a.dat	Black	Slope Brick 33 3 x 2 Inverted without Ribs between Studs
2	98138.dat	Black	Tile 1 x 1 Round with Groove



Tommy Williamson is no stranger to *BrickJournal*, having been featured previously for his Jack Sparrow miniland scale figure. Since then, he has gone farther into building, making some remarkable *Star Trek* props and other models. He's now doing a column for *BrickJournal*: DIY Fan Art. Here, Tommy takes a little time out from his busy schedule at [BrickNerd.com](http://BrickNerd.com) to make a model of his choosing for the magazine.



# City Building on a Micro Scale!

*Article by Joe Meno  
Photography by Jeff Friesen*

Jeff Friesen is a professional photographer who has been building for the past six years. His models are seen on Instagram, and in the past two years, he's started building micro cities. What's fascinating about them is the wonderful use of parts and color to make urban environments that are only 20 LEGO studs by 20 LEGO studs—smaller than a standard baseplate!

When asked about what inspired him to build microcities, Jeff answered by e-mail: "My daughter was given the LEGO Architecture Big Ben set and I was intrigued by how such an accurate model could be made with so few bricks. I actually prefer the microscale Big Ben set to LEGO's much bigger version. LEGO is a modernist medium, and it lends itself well to a stripped-down aesthetic. I also enjoy the puzzle-like engineering problems inherent to microscale, though it is frustrating at times. Someone once said 'children don't play because it's easy, they play because it's hard.' That's exactly how I feel about microscale."

Here's a look at his cities, with notes from Jeff as posted on Instagram, and construction comments by Joe Meno.



**T**his new city is inspired by Zaha Hadid, who designed breathtaking buildings with graceful organic curves and a restrained, often white, color palette. As many of you know, organic curves are not always a great match for geometrically perfect LEGO bricks. I gathered every curved white brick I had in a pile and put them together in somewhat random configurations. Over time the haphazard constructions evolved into what you see here. It was like chicken scratches slowly taking the form of a balanced drawing.

*A limited palette of colors turn this cityscape into a futuristic environment. Curves also emphasize the advanced nature of this city.*

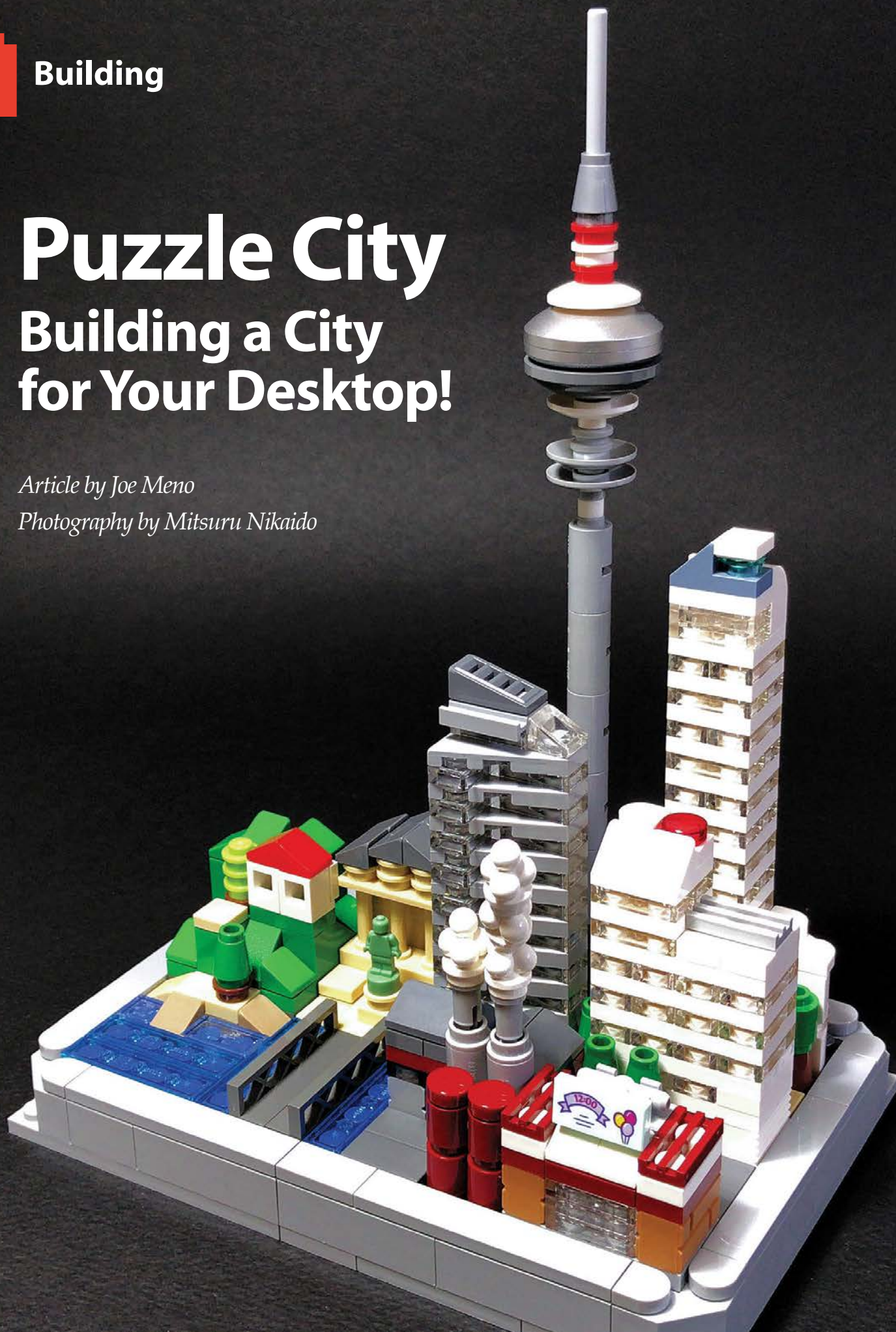
Building

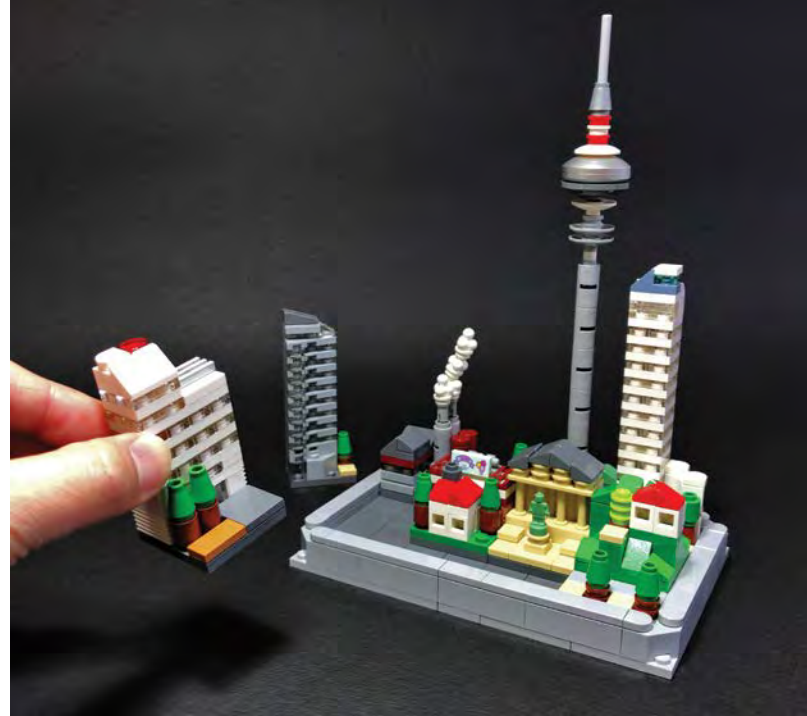
# Puzzle City

## Building a City for Your Desktop!

*Article by Joe Meno*

*Photography by Mitsuru Nikaido*





## City Base

Here are the parts to make the base for the city. You can expand the city by making it wider or longer. It's best to expand in 2-stud increments.

The base has raised edges to keep the city modules in place. This can also let you label your city on the side or top edge.

Finally, you can use other colors for the base. Look through the instructions first and you'll be able to see what you can switch out.

### Parts List (Parts can be ordered through [Bricklink.com](http://Bricklink.com) by searching by part number and color)

Qty	Part	Color	Description
4	4162.dat	Dark Bluish Grey	Tile 1 x 8
16	87079.dat	Dark Bluish Grey	Tile 2 x 4 with Groove
4	2431.dat	Light Bluish Grey	Tile 1 x 4 with Groove
2	3008.dat	Light Bluish Grey	Brick 1 x 8
2	3009.dat	Light Bluish Grey	Brick 1 x 6
4	3010.dat	Light Bluish Grey	Brick 1 x 4
1	3031.dat	Light Bluish Grey	Plate 4 x 4
3	3032.dat	Light Bluish Grey	Plate 4 x 6
2	3069b.dat	Light Bluish Grey	Tile 1 x 2 with Groove
8	3958.dat	Light Bluish Grey	Plate 6 x 6
4	6636.dat	Light Bluish Grey	Tile 1 x 6
8	24246.dat	Light Bluish Grey	Tile 1 x 1 with Rounded End
4	87620.dat	Light Bluish Grey	Brick 2 x 2 Facet





## Minifigure Customization 101 A Review

*Article and Photography  
by Jared K. Burks*

*BrickJournal* is 50 (print) issues old (the initial digital issues make it even older)! I cannot begin to express how amazed, thankful, and privileged I have been to be included on the journey *BrickJournal* has taken, and to have been involved since the fourth digital issue, and in every print issue. The groundbreaking AFOL magazine has had highs, lows, and struggles, but I have enjoyed every moment, every article, and every experience to share the hobby I love with the readers. Honestly, when this started, I assumed I could write three or four articles. I never thought I would write 50+ articles on this hobby I have so enjoyed, or that anyone would spend the time to read them. Thank you for reading; I hope you all have enjoyed the articles as much as I have creating them.

*Joe, I appreciate your efforts more than I have and can express, thank you! John, thanks for believing in Joe's vision and giving him a platform to create it. Thank you for both the opportunities in BrickJournal and the separate Minifigure Customization books that were born out of BrickJournal. Congrats to the two of you on hitting 50 today!*

Today's article is going to cover just how far we have come and what I believe the future holds for the hobby of Minifigure Customization.

In the beginning of this hobby, it was difficult to get AFOLs to consider custom figures as part of the world of LEGO, let alone to consider adding them to their builds. Custom figures were viewed as inferior.

Very shortly thereafter, people were labeled as "purist" or "customizers." Purist would only utilize products created by LEGO and use *only them* in their builds. As the hobby evolved and the secondary manufacturing market started creating accessories and custom figures, it became harder for the "purist" to stay pure. The funny thing is the line got so blurred that people would cut up LEGO packaging and use it in their builds to stay "true" to LEGO to make the claim that they were still "purist." Ultimately, the custom world has fully perfused the AFOL world, and rarely can you attend a LEGO event without spotting many custom elements, figures, etc.

My world view is LEGO exhibits a style, I wanted to stay true to the style, but I wanted to create items LEGO had not. The more figures I created, the more redundant questions I received. This led to creating websites like MCN (minifigure customization network) and ultimately these articles. My first article started by explaining how to create and apply a custom water slide decal. At the time, I had to explain the difference between raster and vector imaging and software, how to "Brasso" a figure to remove printing, and ultimately how to protect your custom figures.

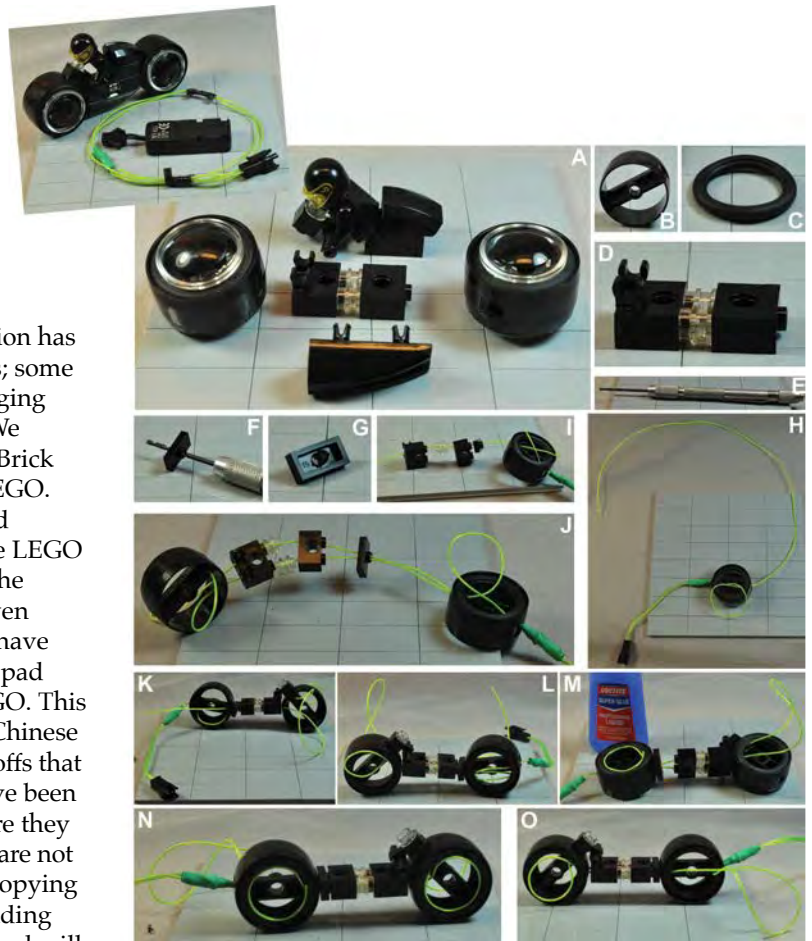
The hobby and these articles started before the "Maker" movement, well before it had hit mainstream society. So the concept of making something of your own was new. People needed to know how to create a template; what line weights to use in designs; there was a ton of curiosity, but little experimentation. People needed permission to alter the LEGO figure and LEGO elements; to know that it was acceptable to cut up LEGO, paint LEGO, sculpt, mold, and cast accessory pieces to LEGO. Given the initial "purist" concept, it took a while for these permissions to come out; luckily it didn't stop us from creating.

Articles have evolved and strayed into new areas as new technologies present themselves. This includes digital macro photography, LED lighting, pressure casting, 3-D printing, wax sculpting, and many more. We know

about vinyl dye, and resin parts, PLA, EL wire, and lasers. It has been an amazing time for the hobby workshop as these various technologies have developed with the Maker Movement, making them more affordable and approachable to individuals. Technologies that would have been prohibitively expensive are now entering our lives, and we are creating amazing things with them.

I am happy to say that the initial need for permission has changed. People are creating some amazing pieces; some have turned that into businesses, completely changing their career trajectories, all for the love of LEGO. We now have companies like BrickArms, BrickForge, Brick Warriors, etc. that are producing accessories for LEGO. You can find their products online and in brick and mortar stores, generally on the aisle adjacent to the LEGO aisle. These mass-produced items have bolstered the community with new material such that people even customize these secondary market items. We also have more than a dozen groups at this point that create pad printed custom figures in the same manner as LEGO. This has led to an interesting turn of events as several Chinese factories have started creating LEGO figure knock-offs that have started to flood the market. These figures have been growing in quality and dropping in price. I am sure they have been a massive frustration for LEGO as they are not paying the license fees, and in some cases directly copying LEGO minifigures. However, the market is demanding greater and more varied custom figures; this demand will always lead to someone addressing that need.

I have created many items I have been proud of over the years—some featured in *BrickJournal* and some not. To name a few, the EL wire-containing TRON lightcycle (stolen at an event, broke the wire and all), the Captain America WWII motorcycle with saddlebags (stolen at an event), Ant-Man riding on a LEGO Ant (smallest thing I have ever decaled), the Advertising Characters, and then there are the many figures I have made for charity. After all, it is a group of charity figures that got me started writing *BrickJournal* articles. These figures were for Katrina relief. The one figure that stands out in my mind was for the Marine cancer patient. That kid—he was 18 years old, but still seemed so young. He came to life when my local LUG had an event for him and I gave him the Marine in dress uniform I had made. These moments stick with me over the years and demonstrate the power of my hobby, to bring joy to others.



Remember when Saturday morning television was our domain, and ours alone? When tattoos came from bubble gum packs, Slurpees came in superhero cups, and TV heroes taught us to be nice to each other? Those were the happy days of the Sixties, Seventies, and Eighties—our childhood—and that is the era of TwoMorrows' newest magazine, covering

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# Brickstuff

## Making Small Lights for Big Ideas in Minnesota!

*Article and Photos  
by Rob Klingberg*



*Rob Klingberg at his office.*

*Lighting up Big Ben!*

*“Wait, is this really a thing?”*



It’s a question I always get asked when people come to interview for a job with my company. Our office is full of LEGO models in various stages of assembly (or disassembly!), and tiny lights and wires cover every flat surface. It probably does look a bit like a mad scientist’s lab, so I can see why people would ask if lighting LEGO models is really “a thing.”

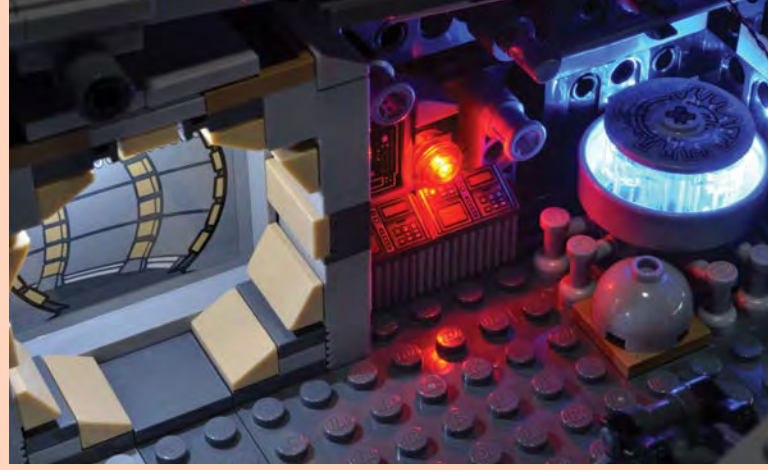
As most people reading this publication know, lighting LEGO models (both off-the-shelf kits and MOCs) is very much a thing. When I began attending LEGO conventions almost a decade ago, it was rare to find lighting installed inside models. When you did find it, lighting was often limited to using strings of Christmas lights or little flickering LED (light-emitting diodes) tea light candles. Since that time, each convention seems to have more illuminated models, and it has also been amazing to see the increase in sophistication of the lighting itself. Today, convention attendees are less likely to see Christmas lights or tea light candles, and more likely to see DIY solutions or professional lighting manufactured by companies like mine.

Since 2011, Brickstuff has been making micro lighting products designed from the ground up for LEGO fans to use without needing to know anything about

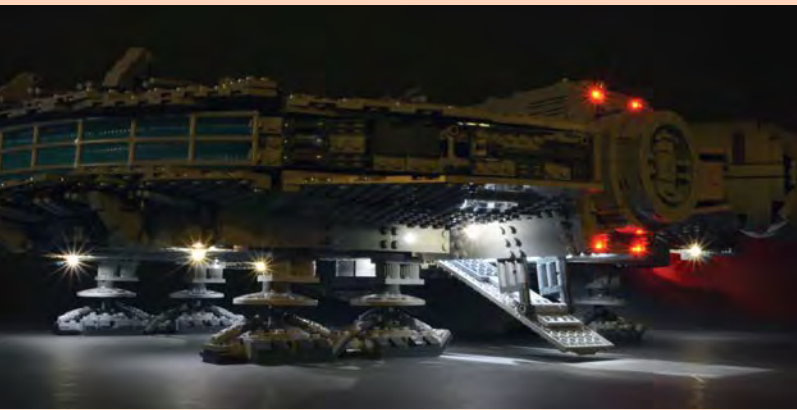
## Lighting a Falcon

With the arrival of the Ultimate Collector's Series *Millennium Falcon*, Rob and his team created a light set that replicates the light and sound effects of the iconic movie spaceship.

Interior and exterior lighting is duplicated using LEDs. Effects, such as the hyperlight drive and laser cannons firing, can also be activated with a remote control. Also, the main hatchway lights when the gangway is opened. There are three variants of the electronic sets: the core light and sound set (\$219.99), the interior light set (\$182.99), and the combined Premium All-in-One set (\$375.99 - \$410.99).



*The hyperdrive system, with rotating lights.*



*Exterior lighting.*

*Some of the lighting that can be seen on the Millennium Falcon.*



*The lit gangway.*





# Sourcing Your Inspiration: How to Find New Ideas in MOCing!

Article by *Dave Foreman*

Photos by *Dave Foreman and Anthony Wilson*  
Parts photos from *Bricklink.com*

“MOC Block.” Oooh, what a nasty phrase. It’s almost as bad as “I stepped on a LEGO” and “unsorted brick.” No one likes having the desire to build and create using this amazing medium we work in, then coming up short on ideas or inspiration. In this article I’m going to explore a few different ways to extract the inspiration to build MOCs from possibly an unlikely source.

I consider myself a jack of all trades when it comes to the world of Construction MOCing. I’ve built big MOCs, small MOCs, your typical Bionicle figures, vehicles, Rahi (the canon term for creatures or animals in Bionicle’s lore), dabbled in still-life and even architecture to small degrees for personal amusement. But the one thing I would say I seem to have in leaps and bounds over my counterparts is the ability to constantly be inspired to build new and different things. One of the most consistent praises I’ve heard from some of my most respected peers is that I have a wide variety of MOCs in my Flickr feed, and it’s often hard to predict what my next MOC will be because they can be so wildly different. I consider that a plus. While the motivation to build isn’t always there and the vibes of putting the parts together don’t always jive just the way I want them to, I’ve always got an idea of something I can build. In fact, I have so many ideas, it’s morphed into a slight negative of having a mental laundry list of MOCs to make. That in turn makes it feel like there’s something that has to get done. The upside is that, if I find myself in a creative rut, I just pull an idea off my mental list and have at it. My most recent example of this is *Panopticon*, a large six-legged “Noodle-limb Mech” driven by a nasty little goblin. This is a MOC that I had simmering in my brain as a concept for years before I actually sat down and built it. More on this MOC later.

Ideas can come from a lot of different places. To explore this further, I sat down with Australian builder Anthony Wilson (The Secret Walrus, which is also his Flickr name) to find out where he gets his ideas.

*Dave Foreman: For starters, why don't you introduce yourselves to our readers.*

*Anthony Wilson:* I'm predominantly a Bionicle MOCist although I build quite a lot of System as well. I've built from a pretty young age but I only started putting my MOCs online around 2013, where I mostly did some (usually pretty bad) castle and fantasy builds. I started making more Bionicle MOCs around late 2014 when Bionicle was coming back, and that's mostly what I've been doing ever since.

*What about Bionicle made you switch from being a System MOCer to working with both?*

I was a pretty big Bionicle fan when I was growing up. I got *Levihak Kal* when I was really young. I didn't think it was LEGO at first, but quickly grew to love it and bought the majority of Bionicle sets up until its cancellation, then a good amount of Hero Factory after that. Eventually I had a pretty big parts pool to use for Bionicle builds when I heard it was coming back.

*That makes sense. I got into Bionicle pretty much from Day One with my first Bionicle set being Toa Kopaka. I had a bunch of sets from Bionicle's predecessors so I was already used to the idea of the style of parts that came with Bionicle, and vaguely familiar with how they integrated into the LEGO I already had as a kid.*

*What inspires you to create, or where do you get your ideas to make MOCs?*

My inspiration for MOCing usually comes from whatever catches my eye visually, whether it's from some video game or a bit of artwork I see. I really like to exploit specific imagery in my MOCs, so often I'll just steal some sort of shape from something I see and turn it into something else. If anyone's played the game *Hyper Light Drifter*, they might recognize some familiar imagery in my MOC *The Harbinger*.

At the end of the day it comes down to me liking the look of stuff and imitating it, and processing it through my own creative blender.

As a fan of Anthony's work I can definitely attest to this. His MOCs are usually very visually striking in their kind of starkness, but also leave a lot to explore. MOCs like *The Harbinger*, *The Herald* and *The Elder Light* all seem to tell this unexplained story. It gives room for the audience member to fill in the blanks, invent a story of their own, and therefore by saying little to nothing at all, engages the viewer.

The inspiration for two of these MOCs seemingly stem from the "square for a head" motif. A simple image or shape has inspired Anthony to create not just one MOC, but two. To be able to turn something as simple as a visual queue from some form of medium into the source of a MOC is pretty powerful. Kudos to Anthony for that.



Anthony Wilson's Harbinger.





Tormod Askildsen at FIRST® LEGO® League World Festival, 2008.

# Talking with Tormod: Looking Forward and Back

*Article by Joe Meno, based on  
an interview with Tormod Askildsen*

*Photos by Joe Meno*

*If you have been involved with the LEGO Fan Community, you would have heard of Tormod Askildsen. As Senior Director for AFOL Engagement at The LEGO Group, he has been responsible for establishing many of the programs the company uses to engage adult LEGO fans. For me and BrickJournal, Tormod is something of a creator figure—he and Paal Smith-Meyer (another LEGO executive) provided the funding to get BrickJournal launched as a print magazine with LEGO's New Business Group, a branch of the company that seeded community-based projects in 2007.*

*Since then, what was a small community of collectors and builders has exploded to groups around the world, including Asia. Tormod has been one of the leaders in LEGO's efforts to engage its fan community. BrickJournal was able to chat with him over what has happened in the past decade or so. Here are his thoughts.*

## Beginnings

I didn't really get into working in LEGO Play before I started working with the LEGO Community. The community started to inform that for me. I had LEGO sets and stuff when I was a kid, but it wasn't something that appealed tremendously to me. I think it was very much FIRST® LEGO® League and getting involved with that and seeing all those things that kids could do and trying myself, that got me building LEGO sets, because I don't go beyond that. I build the sets and I enjoy those and I build them with my family and my daughter; we build them together. That's extremely rewarding. It's so fun to do that, building together. I haven't gotten there—I'm impressed with the people who build creations out of their minds, but I myself haven't gotten to that point.

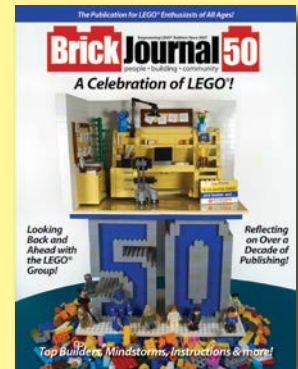
Starting in 1983 at the Marketing Program at Aarhus University, right after attending the University of Southern Denmark, I got a job at The LEGO Group as a Marketing Trainee, and then I quickly got into LEGO Education. I spent ten years at LEGO Education and at the end, I was a little tired of the education business because it was not, in my mind, focusing on how kids learn best. We developed learning materials for curriculum writers and teachers, so the kids were really not first in mind at LEGO Education back then. That was a shame, because I was very, very passionate about how kids learn. Some teachers were awesome in the way they applied the materials. Other teachers couldn't do that. Actually, *most* teachers couldn't really do that.

I have learned that there is one primary driver in learning and that is motivation. You need to want to do it, you need to have a goal or a challenge to make the learning process meaningful and rewarding. The only variable is that it needs to be fun, because no one is going to spend their life doing boring stuff. So if you can find a way to motivate the kids so they want to, then I think you've done 90% of the job in facilitating them. And that is why I got tired of the education system and stuff like that. I was head of marketing at LEGO Education at that time and I didn't know if I could continue doing that. I really wanted to see if it was possible to develop a learning concept outside of the school infrastructure. I mean really for kids, homeschoolers too. Could we try to develop a concept for fun and engaging learning that they find interesting—





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*A closer look at Tormod's gifts.*

could go beyond that because there are millions of adults and teens that use LEGO products that are not members of a user group, or maybe not aware of the community, and get to them as well and engage them, and let people connect and share, and show them all the fantastic media or resources created by members of the AFOL community. We don't want to take it over and get them to come to the LEGO site. Its not like this should be what LEGO can do but it should all be connected into everything else that is in this awesome ecosystem of user generated resources, content and networks. That's one part of it.

The other part is that these adult builders and these teens are absolutely amazing. They are so creative; they have such great capabilities that we want to leverage their ideas to promote the endless creative potential of the LEGO building system. All of this needs to happen in a win-win scenario, so when they share ideas or content with us on LEGO Ideas or LEGO Rebrick, they get something in return. That way sharing and collaboration becomes

*Tormod and Stephan take a look at the Volvo model.*

