The Magazine for LEGO® Enthusiasts of All Ages!





Building Mecha!







you missed the Festival,



Fulip Kit postage in

Limited Edition BrickMagic event set designed by BrickJournal editor Joe Meno. Contains 113 LEGO® pieces, plus full instructions.



This is not a LEGO® Product. These are re-used LEGO elements that have been repackaged or altered from their original form, LEGO is a trademark of the LEGO Group, which does not sponsor. authorize or endorse this product. The LEGO Group is not liable for any loss, injury or damage

> (plus 50¢ postage in



Happy Brick T-Shirt ^{\$} Add \$3 postage per

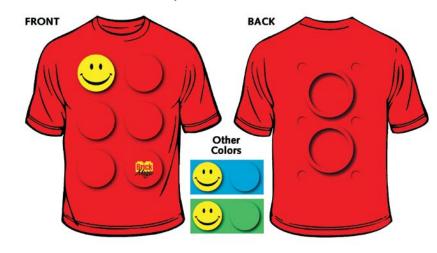
"Be the Brick" and let the world know that LEGO makes you happy with the BrickMagic event shirt! It's preshrunk 100% cotton, with print on both sides. Available in Red, Blue, and Green. Sizes: Youth Medium & Large, Adult Small, Medium, Large, XLarge, and XXLarge. Quantities are limited, so order online or call to insure we have your size and color in stock.

ogo Patch

This embroidered patch (shown here actual size) is the perfect complement to any jacket, vest, bookbag, or other fashion item.



If you're ordering several items or live outside the US, order online and save on shipping costs!





Gordon's MOC won "Best of Show" in the BrickMagic Challenge at the 2011 BrickMagic Festival, and will be featured on the cover of an upcoming issue of BrickJournal! Stay tuned to www.brickmagic.org for details on 2012 events and your chance to win!



TwoMorrows Publishing • 10407 Bedfordtown Drive • Raleigh, NC 27614 USA • 919-449-0344 • FAX: 919-449-0327 E-mail: twomorrow@aol.com • Visit us on the Web at www.twomorrows.com



Contents
From the Editor 2
People
In His Words: Schneider Cheung3
AWord with Jørgen Vig Knudstorp8
Kjeld Kirk Kristiansen:
Growing With the LEGO Group
Builder Spotlight: Brian Cooper14
Builder Spotlight: Fradel Gonzales
Building Alternate Puilding Consorting and the (#5067)
Alternate Building: Super Speedster (#5867) 22 The Maersk Train Arrives 24
Minifigure Customization 101:
Gray Market Accessories30
You Can Build It:
MINI Bounty Hunter Ship34
You Can Build It: Jack Sparrow
Producing Plastic Power Tools
Japanese Mecha: A Gallery
Building Japanese-Style mecha54 You Can Build It:
Micro Mecha and Repair Bay60
Community
Building in Billund
The Pod Races Return!
From the LEGO Idea House:
The Beginning of Plastics 75
Community Ads 78
Last Word 79
AFOLs80
Right: A mecha from Saito Yoshikazu.

Name: Schneider Cheung

(Schfio/Schfio factory)

Age: 38

Country: Hong Kong

I've been a diagnostic radiographer in a regional hospital since 1995. At the beginning, my main duty was taking general X-ray radiographs on patients. However, I'm now mostly involved in the field of Computed Tomography (CT) and Magnetic Resonance Imaging (MRI). As both specialties consider cross sections — either a transverse, sagittal or coronal cut — of a body, I gradually became interested in observing the change of the cross section along the contours of a body during the examination. Also, everything could be divided into voxels. All of these assist me on the "Legolization" of any object. As a result, my career made me interested in LEGO sculpture building.

As a child, my first LEGO sets were probably promotional gifts from powdered milk products, because a LEGO set was very expensive 30 years ago. I could only get LEGO pieces by asking my mum to buy a brand of powdered milk product. Although those gifts contained several simple LEGO pieces, it was easy for a child to be attracted by the toy. Perhaps my creativity started at that time.

Although I lost interest on this hobby during my high school ages, I returned from those Dark Ages 5 years later!

In 2004, I attended a local LEGO building contest in Hong Kong. Luckily, I won the champion through building a landmark of HK: the Peak!





Afterwards, I became totally immersed into "LEGO"! Apart from LEGO building, I'm a LEGO collector too. I collect LEGO keyrings, especially the rare old promotional ones.



In His Words: Schneider Cheung

Article and Photography by Schneider Cheung



At the very beginning after my championship, most of my MOC were buildings. Later on, I started to build some others like robots/mecha (2006–2008).



I promised to my wife that I would make one on her next birthday. I kept my promise and built her a monkey!

In fact, I built only one Lego monkey. With the help of my wife on the post-processing (Photoshop) of photos, a series of different characters were created! And this is the first time I gained my wife's help with my MOC!

Although it looks simple, it's my first sculptural LEGO MOC.



That same year (2006), I was delighted to be invited to build some LEGO displays at the LEGO booth in a local comic festival. I have participated every year since. My first display MOC was a 1-meter tall ExoForce robot sculpture.





Since I'm inspired by Japanese animation, most of my robots are Japanese cartoon characters.

When was the actual time I started changing my building interest to sculpture? As I remember, it probably happened at my wife's birthday. I knew she loved a Japanese cartoon character. I wanted to present her a LEGO model of the character, but I was inexperienced in building a LEGO sculpture. I sent emails to an AFOL halfway around the world; however, I got no reply at all.







The CEO of the LEGO® Group speaks with *BrickJournal*

Interview by Geoff Gray



GEOFF GRAY: Jørgen, as we have done every year with the magazine, it is time again to have a chat with our favorite CEO. It is good to get an insight into how the company itself is doing, and where the company is going. Thanks for taking the time to talk with us.

JØRGEN VIG KNUDSTORP: Geoff, I am very grateful for the opportunity, and not least the comments that I get as a reaction to these interviews. I do believe it is very important for me and The LEGO Group to stay directly in touch with the "grassroots" so to speak. I always learn a lot from it, and it complements my understanding and appreciation of the company, its situation and products — and how these impact the relationships the brand enjoys with users all over the world.

LEGO Systems and NetDevil released LEGO Universe this fall. I was able to participate in the beta for many months prior to the release. It has come a long way since I first had a chance to discuss the project with the company back in 2005. I'd like to discuss this project for a bit.

The concept of a massive multi-player game designed around LEGO building seems to be a very cool concept. However, it seems to be a departure from the core line of business: the manufacturing of the actual LEGO sets. A few years back, the company made a great effort to get back to core business. With such a focus, how does this game fit into the company's business focus?

Yes, it is definitely a really crucial event in the "strategic development" of The LEGO Group. I do see it as a departure from the core business, and I will also evaluate it as such an adjacency to the core. I like to distinguish real LEGO® Playthings from LEGO fan products (and here I don't necessarily refer to AFOLs) such as towels and cups. These latter items do not pretend to be real LEGO true experiences. I don't think anybody would expect anything less than high quality from these products, yet they don't expect them to be part of a creative building system. On the other hand, LEGO Universe is a plaything, it is a genuine LEGO System experience, only not in the real, physical world.

Can you describe the roles that each of the companies is playing in the creation of this game?

The game is entirely a LEGO Game. NetDevil is an incredible, creative, and



Above: Kjeld at his office in Billund..

Kjeld Kirk Kristiansen: Growing with the LEGO Group (part 1 of 2 parts)

Interview by Joe Meno and Megan Rothrock Photography by Joe Meno The LEGO Group has within its staff a few people that are recognized outside of the company. The most well-known is Kjeld Kirk Kristiansen, the owner of the company. He is the third generation of Kristiansens that have grown and watched over the company since its beginning. BrickJournal's editors, Joe Meno and Megan Rothrock, were able to have a conversation with him during the 2010 holiday in Billund.

This interview is literally a look at Kjeld's career and how he grew with the company. Because of the length of the interview, this is part one of a two-part series, which covers his start in the '70s to the '90s.

Joe Meno: You started work at the LEGO Group from your youth to the present.

Kjeld Kirk Kristiansen: That's true. When I am asked about how I grew up with the LEGO Group and the LEGO® product, I always say that we grew up together. The LEGO Group was just starting to make plastic products when I was born and its focus on "LEGO System in Play" from the mid-'50s coincided with me being very eager to use the product. I spent a lot of time as a child and later on, during the '60s, building. I loved building.

To begin with, of course, it was very simple houses and structures we built because we didn't have the clutch power, we didn't have the combination possibilities, and we didn't have that many different elements. I still remember in the late '50s there were only a few elements.

I loved to build ships, for instance. I loved to build - after the first Sputnik was sent into orbit...

Megan Rothrock: You built rockets!

I built rockets and I was fascinated.

The big thing for me was in the early '60s when we invented the wheel.

JM: I was going to ask about that. As you were building, it was one of those things, where it was like, while you were building a house and other things, you were just thinking, "There's gotta be something else..."

Yes.

JM: There's more building, as we (LEGO Fans) do, "I wish there was another piece that could do this..."

Exactly, and of course I loved the possibilities there because then you could — I could — build a lot of different cars but I liked building big cars also. You probably have seen the big red one in the Idea House.

JM: Yeah, when exactly was that one built?

The picture that's there with my father and myself - it says 1976. I think it's actually a few years earlier. But still, the car was built already back in '63 or '64 while I was still going to school. When I came home from school, I went to the model department...

JM: 'Cause you could (smiles)...

...and worked on this project for quite a while. Actually, there were two different models that I made. The one on display is the second one.

I needed a lot of special elements also that weren't there at that time. So I cut and glued...

JM: You modified!

...and modified. Why not?

And in this sense, maybe, I think I gave some inspiration also to the developers. We didn't have a formal product development department at that time. There were those that were working with building models and so on and finding out which new component we needed. Maybe my father and these people were inspired by seeing what I was building.

JM: So when did the Product Development Department come into being then?

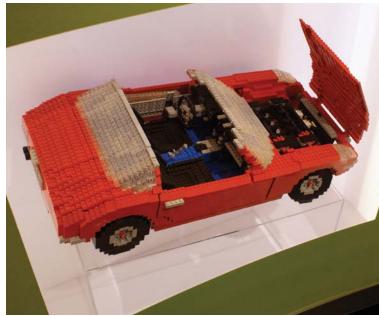
I remember when; it was in the late '60s. '67 - '68, yes, we made a formal product development department. It coincided also with when we had the wheels, we had the motor, and we had the trains. I think it was when we decided to go more into broadening the base...we used to have very limited assortments. We had gift boxes and supplementary sets.

And in the '60s, slowly but steadily, we moved more and more into model boxes also, which started from the mid '60s. The more we saw that it was growing, the more there was a need for a formal process for product development.

JM: By this time — mid-'60s to early-'70s — you were in college... about this time you were starting heading into getting a job here.

Well, that was in the 70s, yes. I finished my education in '72, with an MBA from the International Business School in Switzerland (IMD). I have maintained a strong relationship with my business school in the meantime, being on the board (of Directors) for many years. Now Jørgen Vig (Knudstorp, LEGO CEO) has taken over that seat. I think that IMD is a fantastic business school.

So I was in Switzerland and this coincided in 1973 with the fact that we had a building there which we had taken over that was too big for just the sales office for the company – so my father's idea was to move the technical head, who was in fact Swiss but had lived in Denmark for many years, back to Switzerland to this place where we had our office and start up a small



Kjeld's car model.



Builder Spotlight: **Brian Cooper**

Article by Mark Neumann
Photography by Brian Cooper and Joe Meno

I'd like to introduce a friend of mine. His name is Brian Cooper. Brian is a builder of some of the most amazing LEGO mecha creations I have ever seen. He is a man of few words and usually lets his bricks do the talking. He is probably best known for his gargantuan Gundam styled mecha sporting nondescript names, such as "zero-one," "zero-two," "zero-three," and ... well I suppose you get the idea. We are fortunate enough that he is willing to break his cover of silence and talk with us today.

So first the basics; how did you get into LEGO? What keeps you building with LEGO brick?

Growing up, I messed with LEGO, Lincoln Logs, Tinker Toys, Erector Sets, modeling clay, balsa wood, etc. LEGO "stuck" because it offered the best system as a whole for shapes, colors, mechanicals, recyclability, plus one additional factor that can't be underestimated, minifigures. There was always something more involving about making a world for the minifigure guys, a little storyline that played out. You project yourself into the scenario by way of the minifig. Even now, when I'm making some big mecha, it is for the world of minifigs.

Why mecha building? What inspired you to go big and build gigantic complex LEGO robots?

My big mecha phase really began when anime started showing up on American TV, in particular, the translated *Danguard Ace/Starvengers/Grandizer/GaiKing* shows. About this time I had the LEGO Critical Mass (LCM) to start building big, and technical, with Technic. I made a good six iterations of a fully transformable minifig piloted *Danguard*

Above: A group photo of Brian's mecha.



Builder Spotlight: Fradel Gonzales: Mecha Builder

Article and Photography by Fradel Gonzales

I recall having been a LEGO fan ever since my first set back in the early '80s. There were some stints in my childhood, however, when Lego was not my focus such as during my Transformers/GI Joe phase or when the Nintendo Entertainment System came out. The Classic Space era transitioned into Futuron by the time I was in junior high school and by then I was into other hobbies. I missed out on all those new lines of that period. That would have to be the first "Dark Age" I experienced. I got back into LEGO building for a little bit when Ice Planet 2002 came out and during the Exploriens line but that was more as a set buyer, not as a MOC builder.

I guess I could say I became an AFOL in the modern sense when I joined LUGNET (LEGO Users Group Network, the first international online LEGO community) back in 1999. I was aware of the AFOL scene a few years prior when I would peruse the old AFOL web-ring and the RTL usenet group. During that time, I participated in Todd Lehman's Auczilla's to expand my collection. I stumbled upon a thread that mentioned LUGNET and the rest, as they say, was history.

By 2001, I was living in the Northern Virginia area of the Capitol Beltway. I had just discovered WAMALUG (Washington DC and Metropolitan Area LEGO Users Group), sadly after the '01 BrickFest had already passed. Finally meeting other AFOLs face-to-face was an interesting encounter. I was a little nervous and apprehensive at my first LUG meeting. These people had collections and skill levels that far surpassed mine. I was not sure if they would accept me with open arms or haughtily dismiss me as some "noob" amateur. It's amazing how far I have progressed as a builder and as a member of the community since those early days.

In the community scene, I am known as a "Spacer," someone who builds models in the sci-fi genre and who grew up with Classic Space, one of a lot of sub-genres under that classification. I build things inspired by the shows and anime I grew up with and whatever else has come along since then. Most of my MOCs are military sci-fi, Steampunk, futuristic, mecha, etc. I also really like building micro-scale warships that harken to the days of watching *Star Blazers*, *Macross*, and *Vehicles Voltron* team.

Because the core of my childhood was in the '80s, I was immersed in Robotech, Voltron, Tranzor Z, Starriors, Zoids, and Battletech, so I was a big mecha fan. I had already discovered various AFOL mecha builders on the web-ring around the '97-'99 era. I was greatly impressed by what was being built at the time. Some of the pioneers are long gone from the scene like Trevor Pruden (http://home.cogeco.ca/~tpruden3/ALCindex.htm), Karim Nassar, Mladen Pejic (http://www.brickshelf.com/cgi-bin/ gallery.cgi?f=5984), and Colin Guttierez to name a few. Others like Mark Sandlin (http://www.flickr.com/photos/grandadmiral/ sets/), Bryce McGlone (http://plasmicbricks.com/), and Soren Roberts (http://www.flickr.com/photos/bricklovinfreakboy/) are still around. There were also the Japanese builders like Sugegasa (http://www.brickshelf.com/cgi-bin/gallery.cgi?f=87139), Moko (http://www.brickshelf.com/cgi-bin/gallery.cgi?f=106337), and Padiru (http://www.brickshelf.com/cgi-bin/gallery.cgi?m=PADIRU). Of those, I only know them by screen name.

The early mecha builders were able to pull off quite a bit of articulation with the pieces available at the time like technic pins and brick and finger hinges. I marveled at the latest achievements of ingenuity that would populate the mecha section of LUGNET. I wished that one day I could join those ranks, but I felt that I did not have the skill or collection to pull it off. After I had been able to socialize with a few mecha builders at BrickFest '04, I finally decided to take the plunge.

Beginnings

I constructed my first mecha chassis the month following BrickFest '04. By taking advantage of chatrooms and email, I was able to get good advice on shaping my initial mecha MOCs. Those colleagues helped me get over my construction dilemmas as they cared more about helping my craft develop rather than inserting their own aesthetic preferences. At the time, the joint technology available to me were the parts I

mentioned earlier as well as Pick A Brick-provided hinge plates, the technic articulated arms (used by many Classic Space sets and pre-minifig LEGO people), and a care package of parts sent from Keith Goldman, a fellow sci-fi builder (spotlighted in *BrickJournal #1* and writer to a tribute to Nnenn, a LEGO sci-fi builder, in Issue 13).

After developing the early mecha designs, I went back and cleaned up the color cohesion and started making variants on the base designs to try out different weapon packages and color schemes. The *Battletech* style was a big influence in making those changes. There was also a favorite American-made cartoon called *ExoSquad* that aired for two seasons in '94 and '95. Though the quality of the animation couldn't compete with anime, the stories were more compelling and the mecha designs were also memorable. *ExoSquad* made extensive use of colored variants. You can't always make everything you want in one mecha, but you can always make another one and try new weapons and color schemes with that one.

Aside from making squad of variants, I also make one-off designs. They tend to be larger because I can use more resources into making them since I am not concerned about mass producing them like the smaller ones. I can give them a more armored look and increase the weapons density. The heavier designs lend themselves to a more aggressive look and end up in assault or artillery roles. While I can appreciate the the lithe Japanese designs of the *Gundam* style, I am influenced more in the Western mecha aesthetic.

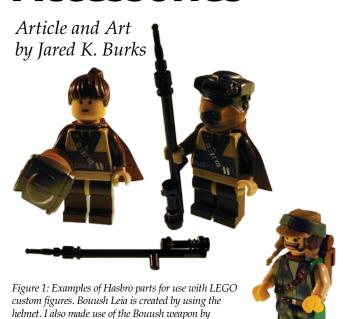




Building

Minifig Customization 101:

Gray Market Accessories



cutting part of the Hasbro weapon and gluing it to some

LEGO elements.

Before we had the Endor Rebel hat the Hasbro option was also available.



Figure 2: Jamie "Morgan19" Spencer's collection of Non-LEGO elements for use in custom figure building.

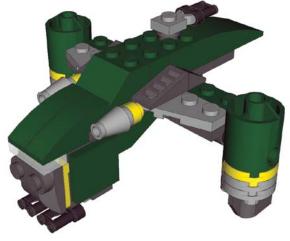
This series has been primarily concerned with teaching how to create custom figures and all the accessories needed to outfit your figure. This isn't always practical and until recently (with the creation of the Collectible Minifigure Series) LEGO accessories were fairly limited. So when you can't or don't want to create every part of the figure from scratch, it is time to look to the grey market of LEGO-compatible accessories. This is actually quite a large field with about 15 main contributors beyond the LEGO clones: Bestlock, Cobi, Megabloks, and Oxford.

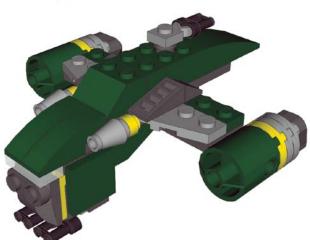
To begin this discussion, please consider that many of the accessories created by the clone brick and action figure companies including: Bestlock, Cobi, Games Workshop, Hasbro, Medicom Kubrick, Megabloks, Oxford, Sidan, Stikfas, and many others are very compatible with LEGO figures. Several customizers have used hats, weapons, capes, and other odd parts to complete a custom figure. One of the easiest ways to make a LEGOized Star Wars Bouush Leia figure, for example, is to use the Hasbro action figure helmet over a LEGO head. This can be a very economical way to get the needed accessory, especially if you don't have the time to make it. Buy the action figure or yes, one of the other companies' sets. I know many wouldn't touch their inferior bricks, but get over it if you need that accessory item (Also you can use those bricks to build your molding boxes instead of destroying your LEGO bricks). Commonly, many of these "other" companies' accessories are sold on eBay and a few, like Sidan, are readily available on Bricklink (www.bricklink. com/store.asp?p=Minifig.Cat). Several of these other companies have themes in line with LEGO and where they succeed, in my opinion, is more artistic accessories. Instead of a plain straight spear it might have detailing or be slight crooked. This detail could help make your custom figure unique. One of the best customizers at using Action figure accessories is Jamie Morgan19 Spencer. Just check out his Flickr gallery: http://www.flickr.com/people/ morgan19/. Also check out his stash of non-LEGO parts he pulls from (photo below).

With knowledge of the LEGO Clones and action figure market we turn to the Grey Market, manufacturers that specifically create accessories that are compatible with LEGO figures. To summarize, I have created a table below of all the vendors, their speciality, and their store location. This is not an exhaustive list of where you can buy items; many of these groups have distributors. To locate a distributor close to you, please check their websites or run a Google search for their names and you can find one in closer proximity to save on taxes and possible import fees. However, whenever possible I always try and buy directly from the manufacturer for the best service. Navigating these sites can be very time-consuming, so understanding your needs before visiting can be helpful. I suggest using search functions on the sites when possible.

You Can Build It







MINI Bounty Hunter Ship

Design and Instructions by Christopher Deck

Hello everybody, I am glad to join again for this great issue of BrickJournal. Today I want to build a new starship type which was introduced during the second season of the Clone Wars TV series in the episode "Bounty Hunters": the gunship Havoc. This vessel was originally a SS-54 light freighter, manufactured by Botajef Shipyards, who also built the AA-9 Coruscant Freighter seen in Attack of the Clones. The front sections of both starships are similar to each other.

The Bounty Hunter Gunship is a highly manueverable craft due to its large and flexible engine pods, a feature that is of course included in this MINI model. The smooth curves of the design have been realized using curved bricks and slopes. Some other important details are included — all six laser cannons! It was not easy to attach the two forward-mounted double laser cannons without exceeding the original dimensions. The model therefore uses an unconventional connection technique by sticking binoculars on 1 x 1 clip plates.

With that our little model is finished. I wish you happy building, and hopefully see you next time!

Yours, Christopher Deck.

Parts List (Parts can be ordered through Bricklink.com by searching by part number and color)

Qty	Color	Part	Description	Qty	Color	Part	Description
1	Yellow	44728.dat	Bracket 1 x 2 - 2 x 2	4	Light Bluish Gray	4032b.dat	
2	Dark-Bluish Gray	4588.dat	Brick 1 x 1 Round with Fins				Type 2
4	Dark-Bluish Gray	87087.dat	Brick 1 x 1 with Stud on 1 Side	2	Dark-Bluish-Gray	2444.dat	Plate 2 x 2 with Hole
1	Dark Green	3004.dat	Brick 1 x 2	1	Dark-Bluish-Gray	3021.dat	Plate 2 x 3
2	Light-Bluish Gray	4589.dat	Cone 1 x 1	1	Dark-Bluish-Gray	3795.dat	Plate 2 x 6
2	Dark-Green	30361.dat	Cylinder 2 x 2 x 2 Robot Body	2	Dark-Bluish-Gray	61409.dat	Slope Brick 182 x 1 x 2/3 Grille
3	Black	30162.dat	,	2	Dark-Bluish-Gray	50746.dat	Slope Brick 31 1 x 1 x 2/3
1	Light-Bluish-Gray	6141.dat	Plate 1 x 1 Round	2	Dark-Green	4287.dat	Slope Brick 33 3 x 1 Inverted
2	Yellow		Plate 1 x 1 with Clip Light Type 2	1	Dark-Green	3039.dat	Slope Brick 45 2 x 2
2	Light-Bluish-Gray		Plate 1 x 1 with Clip Vertical Type 3	1	Dark-Bluish-Gray	47457.dat	Slope Brick Curved 2 x 2 x 2/3 Triple with Two Top Studs
1	Trans-Clear	3023.dat	Plate 1 x 2	2	Dark-Green	50950.dat	Slope Brick Curved 3 x 1
4	Dark-Bluish-Gray	3023.dat	Plate 1 x 2	1	Dark-Green	44126.dat	Slope Brick Curved 6 x 2
1	Dark-Bluish-Gray	3794.dat	Plate 1 x 2 with 1 Stud	1	Dark-Bluish-Gray	32000.dat	Technic Brick 1 x 2 with Holes
1	Dark-Green	3460.dat	Plate 1 x 8	2	Black	2780.dat	Technic Pin with Friction and Slots
1	Dark-Bluish-Gray	3022.dat	Plate 2 x 2	2	Dark-Green	3068b.dat	Tile 2 x 2 with Groove
2	Yellow		Plate 2 x 2 Round with Axlehole	1	Light-Bluish-Gray	43723.dat	Wing 2 x 3 Left
_	ichow	10020.000	Type 2	1	Light-Bluish-Gray	43722.dat	Wing 2 x 3 Right

Parts List

P	arts L	ist	
Qty	Part	Description	Color
1	3024.dat	Plate 1 x 1	Black
1	4073.dat	Plate 1 x 1 Round	Black
4	3069b.dat	Tile 1 x 2 with Groove	Black
1	2555.dat	Tile 1 x 1 with Clip	Black
1	59230.dat	Minifig mechanical Arm Straight	Black
1	30039.dat	Tile 1 x 1 with Groove	Black
1	3794.dat	Plate 1 x 2 with 1 Stud	Black
3	30377.dat	Minifig mechanical Arm	Black
1	4529.dat	Minifig Saucepan	Black
6	3068b.dat	Tile 2 x 2 with Groove	Black
1	48336.dat	Plate 1 x 2 with Handle Type 2	Black
1	4085b.dat	Plate 1 x 1 with Clip Vertical Type 2	Black
1	3958.dat 4032b.dat	Plate 6 x 6	Black Red
1	3022.dat	Plate 2 x 2 Round with Axlehole Type 2 Plate 2 x 2	Red
2	3040b.dat	Slope Brick 45 2 x 1	Brown
1	3069b.dat	Tile 1 x 2 with Groove	Brown
2	3820.dat	Minifig Hand	Brown
2	3819.dat	Minifig Arm Left	Brown
1	3794.dat	Plate 1 x 2 with 1 Stud	Brown
1	3023.dat	Plate 1 x 2	Brown
2	3005.dat	Brick 1 x 1	Brown
2	3688.dat	Slope Brick 75 2 x 2 x 2 Quadruple Convex	Brown
1	2431.dat	Tile 1 x 4 with Groove	Brown
1	30414.dat	Brick 1 x 4 with Studs on Side	Light Gray
6	32028.dat	Plate 1 x 2 with Door Rail	Light Gray
6	87087.dat	Brick 1 x 1 with Stud on 1 Side	Light Gray
1	3069b.dat	Tile 1 x 2 with Groove	Light Gray
2	4274.dat	Technic Pin 1/2	Light Gray
1	32000.dat	Technic Brick 1 x 2 with Holes	Light Gray
1	6019.dat	Plate 1 x 1 with Clip Horizontal	Light Gray
1	3710.dat	Plate 1 x 4	Light Gray
1	2431.dat	Tile 1 x 4 with Groove	Light Gray
2	3622.dat	Brick 1 x 3	Dark Gray
2	2357.dat	Brick 2 x 2 Corner	Dark Gray
1	4085c.dat	Plate 1 x 1 with Clip Vertical Type 3	Dark Gray
2	3062b.dat	Brick 1 x 1 Round with Hollow Stud	Dark Gray
1	2430.dat	Hinge Plate 1 x 4 Top	Dark Gray
1	59229.dat	Minifig Sword Saber with Clip Pommel	Dark Gray
1	2429.dat	Hinge Plate 1 x 4 Base	Dark Gray
1	3023.dat	Plate 1 x 2	Dark Gray
2	3665.dat	Slope Brick 45 2 x 1 Inverted Brick 1 x 1	Dark Gray
2	3005.dat 3068b.dat	Tile 2 x 2 with Groove	Dark Gray Dark Gray
3	44728.dat	Bracket 1 x 2 - 2 x 2	Dark Gray
1	3004.dat	Brick 1 x 2	Dark Gray
1	3010.dat	Brick 1 x 4	Dark Gray
1	2431.dat	Tile 1 x 4 with Groove	Dark Gray
2	87087.dat	Brick 1 x 1 with Stud on 1 Side	White
2	3040b.dat	Slope Brick 45 2 x 1	White
4	30071.dat	Brick 1 x 1	White
1	2430.dat	Hinge Plate 1 x 4 Top	White
1	2429.dat	Hinge Plate 1 x 4 Base	White
1	3023.dat	Plate 1 x 2	White
8	50746.dat	Slope Brick 31 1 x 1 x 2/3	White
2	3004.dat	Brick 1 x 2	White
2	2555.dat	Tile 1 x 1 with Clip	Tan
3	3794.dat	Plate 1 x 2 with 1 Stud	Tan
3	3023.dat	Plate 1 x 2	Tan
2	50746.dat	Slope Brick 31 1 x 1 x 2/3	Tan
2	6019.dat	Plate 1 x 1 with Clip Horizontal	Tan
1	6265.dat	Minifig Skeleton Arm	Tan
4	50950.dat	Slope Brick Curved 3 x 1	Dark Blue
4	87079.dat	Tile 2 x 4 with Groove	Dark Blue
4	3069b.dat	Tile 1 x 2 with Groove	Dark Blue
2	3023.dat	Plate 1 x 2	Dark Blue
1	3010.dat	Brick 1 x 4	Dark Blue

You Can Build It

Bricks of Character



Jack Sparrow

Design and Article by Tommy Williamson Instructions by Joe Meno

Over the past two decades in the film industry I've had plenty of adventures. But none of them compare to my swashbuckling time in the United Kingdom for the making of Pirates of the Caribbean: On Stranger Tides. For nine months I was away from family, friends, home and my LEGO collection. To commemorate my job as stereoscopic supervisor and to pass the time in the evenings, I decided to build Captain Jack Sparrow and Captain Barbossa. For several months, they slowly took shape as I built and rebuilt them. Being so far from my LEGO collection made this a bit of a challenge. While I was gathering a fairly respectable collection in my little flat, it's nothing compared to my bins upon bins at home. My wife was very patient while I sent lists of parts I wanted and she diligently dug through my LEGO bins to send me parts in care packages. Thankfully through her, my connections with the Brickish Association, Bricklink, and my good friend Peter Reid I was able to find all the parts I needed. Finally in March 2011, I was ready to reveal them to the AFOL community and the world. Now you can build one of these infamous pirates for yourself!





Producing Plastic Power Tools



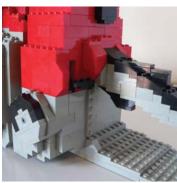
Known for his immensely detailed castles and website Andrastavia, Kevin Hall also is a graphic designer and builds LEGO models for advertising campaigns. Recently Kevin was asked to build some power tools for a print ad campaign for Stihl and talks to us about this fun project.



Here you can see the clips and plate hinges used for the chain.



The casing on the line trimmer uses black plates evenly spaced to look like the vents



The throttle lever can move into an up or down position.



Draft one of the mini chainsaw for the shelf talker



Final model for the mini chainsaw for the shelf talker

As Kevin has been a creative person his whole life, it was only natural for him to become a graphic designer. With around thirty years building and collecting LEGO, and over twenty years in the creative industry, Kevin's creative skills and experience have allowed him to take on commissioned work to build various LEGO models. One such commission was by an agency called The Foundry in Melbourne, Australia to build a life size chainsaw and line trimmer for an advertisement campaign for Stihl.

The initial contact by the agency asked if it was possible to build the chainsaw and line trimmer. "With LEGO, almost anything is possible," Kevin responded. After the briefing with the Art Director, photographer, and production company, Kevin was given a real chainsaw and line trimmer to copy from and instructions to make the models as real as possible. The only catch was that he only had two weeks to produce both models as the photo shoot had already been booked!

Chainsaw Model

The first model that was built was the chainsaw. With the real chainsaw sitting in front of him, Kevin went straight to work building. The guide bar and chain were first to be constructed after the real item was measured and calculated into LEGO brick studs. Using hinge plates and black tiles, modified 1×1 with clips, the chain took shape and as you can see wraps around the bar easily, giving it a realistic look.

The body of the chainsaw was built from the ground up. Setting up the footprint with plates, the bulk of the body was built up with the details added as it progressed. Trying to get the vent on the side to look similar to the vent of the real chainsaw was a challenge. The actual holes in the grill were far smaller than a LEGO plate, so Kevin created something that people would recognise as a vent using black tiles for the holes. Working to the same measurements as the real chainsaw, the main body of the chainsaw curved and lined up in the same way, thus producing a very realistic look.

The covering of the chainsaw was built as a casing, which covered the motor and internal parts. Using red LEGO was an economic choice as orange parts would have made the models too expensive. The finishing touches included the starter handle, throttle, main handle, and the hand guard that has been built on an angle with hinges and technic pins. Taking five days to build and weighing in at around three kilograms, the final model was glued together.

Line Trimmer Model

Having built the chainsaw and put it aside, the next mode was the line trimmer. Kevin stared with measuring the real line trimmer, working out the conversion to LEGO studs and separating the build into six sections.

The shaft was worked on first using plates and bricks overlapping to give it some strength. The guard at the bottom was built next and attached to the shaft with a 2 x 4 hinge plate, glued in place for the correct angle. Attached to the shaft was the handle, glued on at the same position as the real trimmer. The grip and buttons were built next and glued in place.



Japan is home to most of the best mecha builders in the world. BrickJournal's Japanese Bureau went out and contacted them to show their work. Here's a gallery of models along with some thoughts on mecha building from the builders.

Some builders say to "Not be too concerned with scale" or "focus on movement" but more important that that is just to "build as much as one can on a regular basis." Find your own style and then build as much as possible and you will find new possibilities.

—zizy (mecha at left)

Japanese mecha: A Gallery

Compiled by Saito Yoshikazu (Japanese LEGO Ambassador)

Translated by Nathan Bryan, (www.brickzen.com)



When building original models, I try to think about the "overall balance" and "volume" of the silhouette. In selecting parts, I look at the "natural flow of the surface" and making "compelling details." Using LEGO one can make "rigid" models.

—SHINOBU TSUNEKI (Viper above)

Building

Building Japanese-Style Mecha

Introduction

In order to talk about Japanese mecha building techniques, one must first understand the special environment of the builders. Japan is a world-renowned anime powerhouse, however there are no science fiction dramas for adults such as *Star Trek, Babylon 5*, or *Battlestar Galactica*. Mainly, just kids programs like *Gamen Rider* are made.

So in Japanese Anime what kind of mecha appear? In American mecha, ships such as the X-Wing from *Star Wars* or the bodysuits of the *Matrix* or *Avatar* are standard. However, for the Japanese, robots that are humans ride in and control (In Japan they are called "Real Robots") mainly appear. The "Real Robot" boom started with the Mobile Suits that appeared in *Gundam*. From there suits that could "transform" and



change their shape came out in *Macross* and many new design elements became established. It is this environment that most Japanese builders are inspired and it is inevitable that this became the base they used for building.

Design

Before thinking about the how-to-build, here are a few things to be careful about when building Real Robots.

First is the ratio of each part. This is not an absolute, but the body to leg ratio should follow the golden ratio (1/1.618) or the silver ratio (1/1.1414). In other areas, this same ratio should be used. Next is considering range of movement for making poses. In Japan there is a mecha designer named Katoki Hajime. Most of the robots he draws have them standing with their legs positioned a bit more than shoulder width. Fans have named this pose the Katoki-Tachi (Katoki Stand) and it is very popular. Therefore it can be said that the in most magazines, this Katoki-Tachi pose is used. Hence, when building Japanese style Real Robots, the legs must be able to not only move forwards and backwards, but open up to the sides as well.

One more feature is that along with having a human form, the human form should be "armored." The best reference would be that of an American football player. Shoulder pads, elbow and knee protection as well, any "additional armor" to enhance protection when fighting, is good. That is the basic design aesthetic about Japanese Real Robots.

Robot Construction: Head

Similar to building an animal, when building a robot, it is best to start construction from the head. The reason is simple. It is fairly obvious, but when finishing the build and attaching the head to the body, what do you do if the body proportion is too large? What if it is too small? One would need to remake one or the other. Since many people pour their energy and heart into making a original head that stands out, the only thing to do is remake the body. To keep this problem from occurring, it is better to start building from the head.

In designing the head, the first thing to think about is the area of the eyes. In anime, the "Main Camera" is expressed by either a Twin Eye or Mono Eye area. Either one can be used, but generally the main characters (and their allies) use a Twin Eye construct, and the Mono Eye is used for the enemies (especially underlings). This is because the Twin Eye type gives the impression or being technically or financially of a higher quality.

In the actual build, for a Mono Eye, a good starting place is a 1×1 round plate (#4073) or Round 1×1 with Towball (#3614). Especially the #4073 is good because it can be used vertically or horizontally. Personally, I also find the car lever (#4592) to be handy.

A Twin Eye build is a bit more difficult. The larger one makes it the easier it is, but for small builds the choices are limited. For example a standard way to express the Twin Eye is have facing forward at the corner of 1×1 plate (#3024) or 1×1 tile (#3070) on each side.

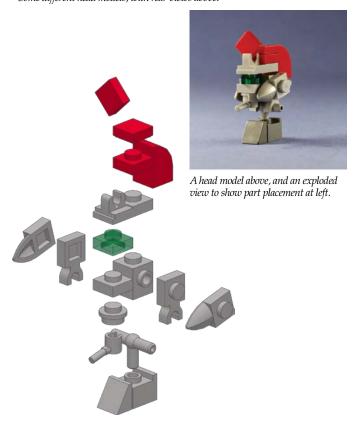
Note that if you use the 1×1 plate (#3024) or 1×1 tile (#3070) for a Mono Eye design, you run the risk of having a flat design The design outside of the eyes will become one of the core aspects of your model, so use your best creative freedom to create something really original. Areas such as the ears and jaw help highlight the facial characteristics. An easy to use part is the 1×1 plate modified with tooth (#49668).







Some different head models, with rear views above.



The LEGO Group



The Pod Races Return!

Article by Hadley Scrowston Photography by Mark Stafford and the LEGO Group.



Watto (left) and Waid (right) are a couple of the minifigures included in the set.

Recently BrickJournal had a chance to interview Star Wars set designer Michael Fuller, and discuss his latest set: Anakin's and Sebulba's Podracers (#7692).

Hi Mike, it's good to meet you. How long have you worked for the LEGO Company?

Around two-and-a-half years, with one year spent as an intern during my industrial design studies before being hired as a designer straight out of university.

Have you always developed for Star Wars?

No, I spent my first eight months learning the ropes in CITY, a great platform that gave me a real headstart in terms of building; I actually learnt most of the tricks from the same guys that designed my childhood toys. I was then part of a three-man design team that put together the second year of the Indiana Jones theme. I was responsible for 7195 Ambush in Cairo, 7682 Shanghai Chase, 7197 Venice Canal Chase, and 7198 Fighter Plane Attack. Since I returned to the company, I've been on *Star Wars* and building for licensed themes has occupied most of my time.

Cool sets! So what have you done for Star Wars?

The podracers were my moment of glory, one of the only sets I really had a burning desire to build since I had joined the project — they were my LEGO brick unicorn. I was actually the one who pitched the idea when brainstorming the 2011 sets, and developed it like a mother to a child. Whilst developing those I was also building the Interior Hoth playset, before that, 7929 Droid carrier, and 7968 Mace Windu's starfighter, then — hang on a minute when's this being printed — erm, I develop and work on a lot of products, but of course only the best makes the cut.



The Beginning of Plastics

By Kristian Hauge, The LEGO Idea House Photography by the LEGO Idea House and Megan Rothrock Ever wonder when the LEGO Group started to produce plastic toys? Here The LEGO Idea House shares their story.

The LEGO Group's journey into plastic started in 1946 when the founder of the LEGO Group Ole Kirk Kristiansen placed an order for a plastic injection molding machine. The machine was delivered in 1947 and kicked off the LEGO Group's adventure into the world of plastic.

From the very beginning in 1932 until the late 1940s, the LEGO Group only produced toys made of wood. But LEGO® founder Ole Kirk Kristiansen was always looking for new materials that he could use to produce toys. Mainly due to World War II, it became increasingly more difficult to find wood that could reach the high quality standards of the LEGO Group. Because of the lack of wood, Ole Kirk had an even bigger incentive to satisfy his curiosity towards new materials to be used for producing toys.