



# The VINTAGE *Ford*

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# AMBULANCE 255: FROM BUILD TO THE 2013 INAUGURAL PARADE

By George King III

I purchased my first Model T in 1963 when I was a sophomore in high school. I did get it running, but I never achieved a truly restored car. Since then, I have found that I get a great deal of satisfaction from rescuing an ancient relic from the scrapyard. I like to think of it as "Lazarus Engineering" where I bring them back to life. Eleven years ago I began restoring Model T engines and drivetrains full-time. I have had the opportunity to work on many wonderful cars and to restore my own cars to a much more acceptable level of presentation than my first attempt.

My most recent project was to build an accurate Model T ambulance, representative of the cars donated by Americans and driven by American volunteers in France during the first three years of World War I.

It started in 2006 when I visited the Collins Foundation in Stow, Massachusetts. Among the collection of historic vehicles and aircraft, I noticed a Model T Ford ambulance on the second floor. It was in storage at the time, but I made my way over to it. It was obvious that the ambulance had been assembled from a wide variety of Model T parts spanning many years of production. I thought it would be a good project. But before I could submit a proposal to the foundation, I needed to do some research to understand the history behind the vehicle.

The sides of the vehicle were lettered in white, proclaiming that this ambulance had been a gift to the American Ambulance Service from the Lake Forest College Class of 1917. Since I was not familiar with ambulances of World War I, I felt that I needed to do my homework.

I began to research the history of volunteer ambulance services during the war. I uncovered an amazing tale of generous Americans donating ambulances and young American drivers paying their own way to France, buying their own uniforms, and then serving for six months as drivers on the front lines of the War to End All Wars.

My first reaction was one of self-disappointment. Why had I not heard of this before? I like to think of myself as being knowledgeable in American history and especially anything to do with the Model T Ford, but I was unfamiliar with this program.

The more I learned, the more I felt that this story must be told. Not only is it an important chapter in the history of the war, but more importantly, it documents the unparalleled generosity and selfless giving of Americans who willingly assisted France in time of need.

At some point in my research, I came to the realization that the only way to properly tell this story was to build an ambulance.

My research uncovered the story of several volunteer ambulance services in France during World War I. Noteworthy among these was the American Field Service which was originally affiliated with the American Ambulance (field hospital) in Paris.

Ambulances of the American Field Service made their first appearance near the end of 1914. By the time the United States entered the war in 1917, one thousand two hundred ambulances had been shipped to France from Detroit. The bodies for these ambulances were constructed in the carriage shop of George Kellner and Sons in Billancourt, France.

My goal was to accurately restore an original Model T Ford and construct a new body using the exact same materials as had been used by Kellner.



The ambulance at the Collins Foundation was a movie prop driven by Bill Murray in the 1984 movie "The Razor's Edge"



One of the first decisions I faced was what year to make my ambulance. I decided on 1916, which was after the AFS became independent of the American Ambulance (Field Hospital) and before the United States entered the war.

Ambulances were organized into groups of twenty called a section. The first section formed in 1916 was Section Sanitaire Etats Unis 8, simply abbreviated SSU 8. In searching the American Field Service archives in New York, I uncovered two photographs of a 1916 ambulance donated by the Groton School in Groton, Massachusetts. It was designated as ambulance 255.

My research uncovered far more information than I had expected. Seventy-seven percent of the drivers were college students or recent graduates. They were accustomed to writing home and keeping a daily journal. Many additionally had a Kodak camera. These sources combined to create a detailed record of firsthand experiences at the front. Many journals were privately published while much of the material from personal records and letters home appear in two published works by the American Field Service. The latter, a three volume set published in 1920, chronicles the record of each section from its formation to the end of the war.

During the course of my research I found that there was one remaining AFS ambulance in a museum in France. I also discovered that Model T owner Rémi Thevenin had compiled a complete set of ambulance drawings. Rémi had visited the museum once a week for three years and created detailed, dimensioned drawings of each part.



*Ambulance 270, the sole survivor, as it appears in temporary storage in the Musée de la Voiture in Compiègne, France*

My three years of research culminated in a trip to France in September 2009 to see the ambulance and meet Rémi Thevenin. I stayed with Model T owners Jean-Claude and Françoise Emond and Jean-Jacques and Maryse Michel for two weeks and enjoyed driving their Model Ts through the French countryside.

The visit was a resounding success and I returned with photos of construction details and a complete set of drawings.

Construction began as soon as I had returned from France in September 2009. We were careful to select parts that are correct for a 1916 Ford. The engine block was cast on December 7, 1915 and finish machined on December 27. The model year for 1916 began in August.



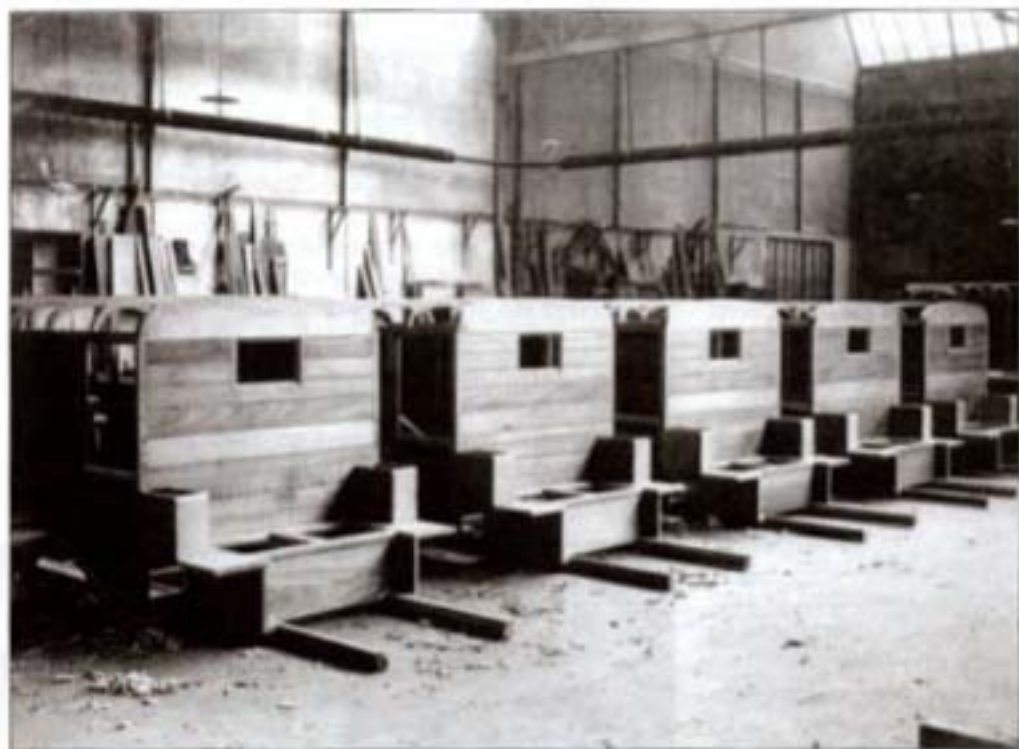
*The block for Ambulance 255 as found and after we thermal cleaned and shot peened it*

The December manufacture date was perfect for an ambulance that went into service in France in May 1916. Restoration proceeded in the usual manner through the winter and into the spring and summer.

Research into the writings of early ambulance drivers provided a clearly defined reference to the building materials for the body. I visited the American Field Service archives in New York to get detailed information from the official records. This repository of photos, letters, documents and artifacts from the ambulance days, became a regular place to visit throughout the entire project.

In the photo archives I found an 8x10 photo from a glass plate negative of ambulance bodies being constructed at Kellner's. Since the original size was so large, the resolution was exceptional, regardless of how much I expanded it. The detail in this photo is so good that I could easily see the wood grain, the type of scarf joints used in construction and the location of each nail on the front wall of the ambulance.





*This photo of the bodies being built at Kellner's became the most important image used in the construction of Ambulance 255*

*Courtesy of the Archives of the American Field Service and AFS Intercultural Programs*

I had conducted research into the main sources of mahogany lumber during the period of the First World War. Knowing that there are many woods called (and mis-called) mahogany, I sought the advice of professionals. I contacted the U.S. Forest Service Dendrology Lab and the International Association of Hardwood Foresters and sent them each a copy of the Kellner photo. We then had a conference call. "Gentlemen," I asked, "I know that the wood used in the construction of these bodies is mahogany. The question is what type?"

The conversation between the two professionals was short and they announced that it was African mahogany. "Where on the continent does that grow?" I asked. The U.S. professional answered, "On the bulge of the continent on the west coast." I then asked for the dendrological name. *Khaya Ivorensis* was the answer. "Ivorensis as in Ivory Coast?" I asked. The reply was affirmative.

I explained to the professionals that the Ivory Coast was a colony of France during this period and that in 1919 France had imported 24,000 long tons of mahogany from the Ivory Coast. "Your search is over. That is it," was the reply.

Through the help of project volunteer Matt Malley of H&B Woodworking in Plainville, Connecticut, we were able to import \$4,000 worth of African mahogany for the project. This was made possible through the funding efforts of antique Ford collector Carl Pate and the American Ambulance Service Inc. in Norwich, Connecticut.

The original framing material for the ambulances was ash so that is what we used. Every piece had to be carefully milled to the exact metric specifications of the drawings. I decided at the beginning of the project to work with the metric dimensions on the print rather than convert them. This, I figured, would avoid transposition errors in both directions.

The descriptions and details of the drawings were, naturally, in French. My skills in the language and in metric measurements are far better now than at the onset of the project. The drawings were invaluable in constructing the

ambulance. Some interesting details would not have been obvious from just taking external dimensions and photos.

I had four wood professionals who helped with the construction. One was Doug Brown, who teaches students in the art program at the Gro-

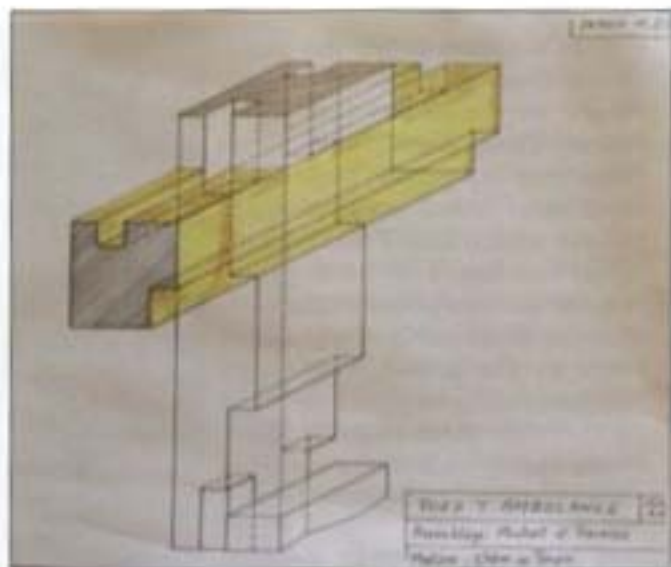


*Carl Pate (left) and author George King with the mahogany imported from Africa*

ton School to construct furniture from mahogany. He is also the archivist for the school and we have spent many an enjoyable hour searching the archives for information on the ambulance and the drivers who volunteered from Groton.

I brought some of the ash to Doug's shop at the school so we could cut it to dimension. It was a real treat to work in the shop at the school that had donated the original ambulance in World War I.

One of the most interesting components of the frame construction was a series of vertical and horizontal pieces that interlocked like a Chinese puzzle. The five vertical members and two horizontal members were tightly fit together. One side then received a tightly inserted piece running from front to back on the inside. The outside had the "American Ambulance" sign attached with more screws than one would think necessary. This is because the sign is actually part of the interlocking construction. This assembly is called a tension



One of several drawings on how to make the tension box



Doug Brown at the Groton School milling ash on the jointer for the framing of Ambulance 255

box. It is so rigid that no gussets or diagonal bracing is necessary to keep the body stiff.

To ensure that the construction of the body was historically correct, Rémi Thevenin sent me a box of antique, metric French carriage bolts and nuts to use in constructing the body.

We did not utilize original hand tools, but opted for the more accurate power tools and machines. The Kellner shops had electricity as shown in photos of the bodies being constructed. Large electric motors would power line-shafting for heavy planers, jointers, and saws during this period.

Most of the cabinet work was done at H&B Woodworking. I joined artisan Matt Malley on ten occasions of up to ten hours a day to learn from the master about joinery as we formed the complicated pieces. Even the simple pieces were not as simple as one might think. For instance, the boards that make up the side planking of the body are only 3/8" thick yet they are tongue and groove. Each of these pieces had to have one edge trued on the jointer, then be planed to thickness, ripped to width, cut to length, a tongue cut on one edge and a groove on the other. Each piece of the siding received a minimum of seven steps. Multiply this by 225 pieces of wood and you can get an idea of the scope of the project.



Note the difference in the head shape and collar shape between the American bolt (left) and the French bolt. My friends both in France and the U.S. held me to my word of an accurately recreated ambulance.



In addition to all the woodwork that we needed to make, there were also a lot of metal parts. These were broken down into two categories: forge work and sheet metal work. Model T owner and fellow Four Seasons club member Ted Swol volunteered his exceptional talents to do the blacksmith work necessary for the project. Ted set up his forge in my backyard and kept it there for three months. There were eighty individual pieces of steel that had to be hand formed on the anvil.

In January of 2011, we were invited to show Ambulance 255 at the Frank Maratta Show in Hartford. This invitational car and motorcycle event is one of the largest winter gatherings for cars in Connecticut.

I was setting up the exhibit on Friday morning when the door at the far end of the Expo center opened and one of the exhibitors stepped in. He look at my half-completed car and made a bee-line for it. At this time, I had no signage in place and no lettering on the ambulance stating what it was. The man looked at me and asked, "Is it American Ambulance or Norton Harjes?" (Both organizations were volunteer ambulance organizations in France during WWI). "American Ambulance," I replied, "But how do you know what questions to ask?"

He explained that he was a collector of First World War volunteer uniforms and memorabilia. We chatted all weekend and as we were getting ready to pack up on Sunday, he came over and said, "I own a sheet metal company in Massachusetts and I would like to volunteer to make the sheet metal parts you need for the ambulance." Needless to say, with fifty sheet metal pieces to be fabricated I needed all the help I could get, especially from a skilled professional.

Mark had no problem working from the French drawings and dealing in millimeters instead of inches. Having the machines and skills to do the job right made short work of all the sheet metal parts for the ambulance.

Over the course of the research and construction of Ambulance 255, we had approximately forty people who volunteered in France and in the United States. Some



*Matt Malley of H&B Woodworking making the eighty-six mahogany, tongue and groove boards for the sides and front of the ambulance body.*

*Matt donated all of his time to the project.*



*Sparks fly as Ted and George forge one of the larger pieces for the tailgate of the ambulance*

*Photo by Tom Leffingwell*





*Mark Day at the brake in his sheet metal shop.  
It turns out that he is as fussy as I am, which is no small accomplishment.  
As a result, the sheet metal on the ambulance is flawless.*

volunteers assisted with research, others with finding original parts and accoutrements both here and in France. Some donated money to keep us going while others came to the shop and lent a hand. The record of the greatest distance traveled in the U.S. to assist with the project goes to Mark Kelsey who made several appearances over the nearly three years of construction from Pantego, Texas.

Two volunteers in particular went the extra mile in preparing Ambulance 255 for display and operation. They are Gwen and Parker Ackley of Fairfield, Connecticut. Gwen and Parker logged in more hours on the ambulance than any others.



This is not a simple task as it takes them two hours just to drive here. I especially remember one occasion when Gwen and Parker drove up to help us get ready to show the car for the first time as a "work in progress" at the Norwich car show. As always, the project took longer than expected and Parker and I worked all night to get the frame of the body assembled on the chassis. As dawn broke, we were still at it, just so we could say that we finished in time. We went to bed at 5:00 AM to arise for the show at 6:00 AM. It was at this point that I discovered that pulling all-nighters is best left to the younger generation.

*In addition to their assistance in the Ambulance 255 project, Gwen and Parker (seated) collect vintage clothing, which they wear when driving their 1915 Dodge Brothers' touring car.  
On one excursion to a military show in New York state, I found an original WWI ambulance driver's uniform in Parker's size.*

*Since AFS ambulances were taken over by the Army when the U.S. entered the war, this makes an appropriate "next-chapter" presentation when we exhibit the ambulance.*





*Volunteers at "Build an Ambulance Day"*

Many friends and members of the Four Seasons Model T Association (our local chapter of the MTFCA) had expressed an interest in helping with the project. On August 28, 2010 we held "Build an Ambulance Day" in North Franklin, Connecticut.

Volunteers came and went all day as their schedules would allow. At the end of the day we had been assisted by helpers from Massachusetts, New Jersey, Connecticut, Rhode Island, Connecticut and Texas.

On the Saturday morning of "Build an Ambulance Day" we started with a chassis on temporary wheels. By the end of the day, twenty volunteers

had finished their assigned tasks and we took it for a ride.

With the running chassis completed, it was time to start on the construction of the body. The first ambulances were covered with canvas. The arrangement did not work well as it could not be easily cleaned and it did little for patient comfort during the winter months. Inspector General A. Piatt Andrew writes, "... we abandoned the lighter covering altogether and substituted matched boarding of tough mahogany for the sides and top, and this we continued to use until the end of the war."



*In auto racing the victory lap is the last one, in auto restoration, it is the first!*



Work progressed through 2011 and into 2012. It seemed that the more pieces we installed, the more were waiting. It is like eating an elephant: you can only go one bite at a time; you feel you will never finish, but with perseverance you are eventually done.



Like the story of the elephant, we finally did finish. On May 5, 2012 we held the dedication ceremony for Ambulance 255. We selected this date because the original Ambulance 255 entered service in France on May 5, 1916. We were joined by 100 volunteers and friends who had contributed to the project. The event was held at the headquarters of American Ambulance Service, Inc. in Norwich. American Ambulance has been one of our most enthusiastic supporters since the start of the project.



*One hundred friends and supporters joined us for the dedication*



*Assistant Jeff Saville drives 255 for the Grand Entry*



*Despite my nautical background, I refused to break a bottle of champagne over the bow at the commissioning. I thought it to be a waste of a perfectly good bottle of champagne and I was not about to break anything over any part of our newly completed ambulance.*



Within days of the dedication, we were on our way to fulfill our mission of telling the volunteer ambulance story and to promote volunteerism. Our Memorial Day week activities took us to five events from Maine to Virginia. After an appearance in the National Memorial Day Parade in Washington D.C., we paid a visit to Arlington National Cemetery to pay our respects at the grave of Cpl. Frank W. Buckles. Corporal Buckles was the last surviving American World War I veteran. He died on February 27, 2011 at the age of 110. Frank served in the United States Army as an ambulance driver.



*Paying respects to Cpl. Frank W. Buckles, U.S. Army ambulance driver*  
Photo by Kim Scianghetti

In 2012, Ambulance 255 made twenty public appearances. And it was not late into 2013 when we made our first for that year.

When we began construction of Ambulance 255 in 2009, I was thinking of appropriate events in which we could participate. I came upon the idea of driving in the 2013 Presidential Inaugural Parade. In September 2012, (before the election) I made application to be in the parade. I was warned by the Presidential Inaugural Committee (PIC) that the competition would be tough with an anticipated 2,000 applications expected. Not afraid of a challenge, I signed up.

The week before Christmas I was informed that I had been selected to participate in the parade. I was excited, elated, and had an immediate sense of much to do in little time.

There were a myriad of details to attend to.

The little details on the ambulance that "we would get to later" now were on deadline. Little things like leather straps on the window latches, final details on the rear curtain and a dozen more had to be completed before the inaugural parade. The major item missing was a special latch for the front window. It was available only in France and had not been produced in many decades. It was an elusive detail for which I had been searching with no success.

I follow an online auction in France quite regularly and I had seen the specific window latch that I needed on several occasions, but they were always too big. In December, after four years of searching, I found one the right size and submitted my bid. Two days before I received notice from the PIC, I received the latch in the mail. It was installed in time for the parade.

One of the problems in transporting Ambulance 255 is its size. It is over fourteen feet in length but more inconvenient, it is over seven feet tall without the spare tires on the roof. Few trailers can accommodate this height.

I am quite fortunate to have a friend in Glastonbury, Connecticut by the name of Carl Pate who owns such a trailer. Carl is a Ford collector, not only with Model Ts, but also a 1903 Model A and a 1905 Model F. He often hauls two cars with their tops up and as a result has a twenty-four foot trailer with a 76" door. Carl is the author of the definitive book on Fords that preceded the Model T, *Pate's Early Ford Automotive Encyclopedia 1903-1909* (available from the MTFCA). Carl has hauled me to several distant events and once again answered the call for the inaugural.

We loaded up on January 17 and headed south two days later. On January 20 we unloaded in our nation's capital and attended our afternoon briefing, which took one hour. We then made last minute preparations for the inspections later that day. We would be inspected by the Department of Motor Vehicles, the fire marshal, and the Secret Service. These inspections would be at night without the drivers present.

I left the assembly area at 5:00 PM and walked one block to the Native American Museum where my wife, daughter, son-in-law, and grandchildren were finishing up a long day of exploring our nation's capital. We walked down to the ambulance so they could see it in the assembly area.





*Three of my grandchildren in the ambulance the night before the parade.  
Notice the DMV inspector at the rear of the car.*

While I was there, the DMV inspectors arrived and began looking at the Model T. One inspector was looking at the rear end and saw the spots where oil had dripped down from where I oiled the brake linkage. He informed me that I had a hydraulic fluid leak from my right rear brake cylinder. This would disqualify me from participating in the parade since it could affect my braking capability. After a short lesson on the mechanics of a Model T he removed the violation from my inspection sheet. I was so glad that I happened to be there at the right time. That was a close call.

After several years of anticipation, the big day finally arrived. I had to be in position prior to 10:30 AM for a parade that was scheduled for 2:30 PM and actually started at 4:00 PM. Being a seasoned veteran of these parades I knew that it would be a long, cold wait. To prepare for this, I had purchased an electrically heated motorcycle rider's vest and a pair of electric insoles for my shoes. The projected temperature for parade day was forty-three degrees, so I decided

not to use the vest. Instead, I wore a sweatshirt under my uniform shirt, my uniform coat and my good old New England barn jacket over the whole thing. I found this to be comfortable, but I did plug in the electric insoles. Those were wonderful. With an antique lap robe over my legs and feet I was in good shape for the parade.



*The well-insulated barn coat was even the right color to match my 1916 ambulance driver's uniform*



The parade got started around 4:00 PM and we headed down Pennsylvania Avenue.

The highlight of the parade for me was seeing my family in the stands. I could hear my six-year-old granddaughter, Amelia, yelling "Granddad!" over the din of the crowd.



*Just look for the frantically waving arms and you will find my family*



*First Lady Michelle Obama smiling and waving as Ambulance 255 passes in review*

In 2010, First Lady Michelle Obama gave a number of commencement addresses at various universities extolling the virtues of volunteerism. I wrote to her after that to applaud her comments and to tell her of our project. In that letter I informed her that we had a goal of driving the ambulance in the 2013 inaugural parade. I concluded the letter by writing, "I look forward to waving to you from the front seat of Ambulance 255."

Two weeks before the parade, I wrote to her again and reminded her of my 2010 letter and to tell her that we had been selected to participate in the parade. I again said that I would be waving to her.

I hoped that one of her staff would tell her about the letter before Inauguration Day. As I approached the reviewing stand, President Obama was standing. I saw him consult his list of parade participants, which was on a table to his left. He then looked out the window and saw me approaching. He leaned down to his right and said something to Michelle. She looked up and began waving as I drove by.

Being accepted to participate in the 2013 Presidential Inaugural Parade was a great honor and it still amazes me. There were 2,807 applicants and only sixty-three were selected. This includes the military units from the five armed forces plus the U.S. Merchant Marine. Ambulance 255 was the only unit selected from the state of Connecticut.

We had no political connections or other outside influences that resulted in our selection. We made it to the parade on our own merit as an organization and an interesting artifact from the past.

My personal history of inaugural parades dates back to 1969 when I marched in Richard M. Nixon's first inaugural. While in the United States Coast Guard, I participated in three more. I found that I enjoyed driving in the 2013 parade better than marching.





*Ambulance 255 passes 13th Street on Pennsylvania Avenue*

Having recovered from the Washington, D.C. high adventure, we will now prepare to make Ambulance 255 an international star. Our next goal is to bring Ambulance 255 to France for the centennial of World War I.

Individuals and corporations willing to help in this effort can contact:

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Ambulance 255 Project  
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[www.ambulance255.org](http://www.ambulance255.org)

Watch for us on France 24 TV from Paris in 2014. □



