

The Beast - Theodore W. Striker

He walked unobtrusively out of a side door, around the car and climbed into the rear seat via a large door held open for him by one of the five men standing in a circle. The door was quickly shut with a loud, heavy, “thunk” by the same person who remained by it after it closed. The scene was completed by the car’s slow departure, accompanied by a procession of similar cars as well as SUV’s, trucks, and an ambulance. The limousine seemed to disappear in the midst of the other vehicles as they slowly made their way toward their destination.

This train of events is duplicated each time it is necessary for the President of the United States to go from Point A to Point B. Transporting the President is a complicated, complex process which is supervised by the United States Secret Service. The Secret Service is now responsible for the design, storage, maintenance, and driving of the cars in which POTUS, or President of the United States, rides.

The current car, was placed into service in 2009, and is due to be replaced this year. The new vehicle was planned for the inauguration parade of President Trump, but was not ready for the event and has yet to be completed.

What is it that makes this car different from other vehicles? The first thing that is immediately apparent is the size. When seen on television the car looks like any other luxury limousine. Its body is modeled after the current Cadillac limousine, but it is two feet longer at 216”. It is also much taller at 70”, which facilitates quick, safe entrance and egress. Appearance is not marred by the presence of unique characteristics. The armor plating is reported to be eight
2.

inches in thickness and the bullet-proof glass is five inches thick. There are no keyholes - the doors are unlocked by a mechanism known only to the Secret Service. Only one window opens - the driver's window - and it only opens three inches.

There are other features that are not immediately obvious to the casual observer. The President's seat can be raised and lowered depending upon how much visibility is desired. The rear area seats seven people and can be completely isolated from the front. The front compartment seats the driver and the personal presidential Secret Service agent. Both front and back compartments have cases for shotguns. The trunk houses tanks of oxygen in case of a gas attack, the effect of which would be minimized by the door seals. In addition there is a refrigerated container carrying units of blood of the President's type in case of his injury. The outside of the vehicle is also extensively modified. Kevlar, puncture-resistant tires are mounted on special alloy constructed wheels. This structure allows quick escape from any situation in which the tires may be deflated. Defensive structure includes heavy steel plating over the bottom of the entire vehicle. Modifications and additions to the vehicle bring its weight to between 7.5 and 8.5 tons. The actual weight is classified by the Secret Service. There are between twelve and fifteen presidential limousines, at least two of which are used whenever the President travels. It is never obvious which vehicle is carrying the President. When traveling outside of Washington, D.C. the limousines and other special vehicles are transported in planes specially built for them.

In addition to the protective cocoon around the President there are several offensive

3.

mechanisms for counter-attack if indicated. There are teargas cannons on both sides of the car. There are smoke grenade launchers to make the vehicle a more confusing target to isolate. Along with the offensive and defensive mechanisms is the vital system allowing continuous, consistent communication for the President. There is secure telephonic and computer capability whether in the continental U.S.A. or abroad. In the interest of Presidential comfort and that of his passengers the back compartment is hermetically sealed and has independent temperature and humidity controlled atmosphere. There is a bar and a refrigerator, as well as a desk/table for serving or working.

With all of the design modifications and special improvements there have been challenges. In Dublin, Ireland the limousine became immobilized while trying to exit the grounds of the embassy when the rear wheels were airborne as the front wheels were on the ground over the lip of the driveway. In London the car became trapped while attempting to turn around in front of #10 Downing Street and had to be manually extracted. In Israel the engine shut down for no apparent reason, at which time there was confusion over what fuel was used. In each instance of malfunction the ubiquitous backup car was impressed into service.

William Howard Taft was the first president to use a motor vehicle with any comfort. Prior to that most people, including presidents felt that automobiles were unsafe, unreliable or both. Taft purchased the first fleet of cars for the White House in 1909: two Pierce Arrows, one White Steam Car, and one Baker Electric Car. Not much is discussed about cars until FDR ordered the Sunshine Special in 1939. It was a stretched, armored, convertible limousine with bullet-proof glass. As World War II progressed it was enhanced and modified in 1941.

4.

Prior to the arrival of the Sunshine Special FDR rode for a period in an armored 1928

Cadillac which had been seized by the Treasury Department from Al Capone. As word of this fact became known public opinion forced him to give up the notorious car. It is interesting that with all of the armoring and safety provisions in the Sunshine Special, that it was a convertible which was frequently driven with the top down.

The Ford Motor Company dominated the limousine construction for Presidents for the first half of the twentieth century. The Lincoln division built cars for Presidents Roosevelt, Truman, Eisenhower, Bush, Kennedy and Reagan. After the attempted assassination of Ronald Reagan the Secret Service turned to General Motors Cadillac Division. General Motors continues today as the prime contractor to construct new limousines but several sub-contractors and specialty manufacturers now participate in the production of each unit so that each is only superficially a Cadillac. The bulk and weight inherent in all of the modifications have necessitated the extensive use of special, heavy-duty truck components..

The basis of my interest in presidential limousines was the accidental meeting that I had with Mr. Willard Hess while we were each out for a walk. It was then that I first learned of Hess & Eisenhardt, a local manufacturer known for the special area of customizing cars for government officials and royalty. The company began its existence as Sayers & Scovill which was a manufacturer of carriages in the late 19th and early 20th centuries. Emil Hess began working for Sayers and Scovill in 1891 along with Charles Eisenhardt, Sr. Their sons, Willard and Charles, Jr. went to work at the company in 1930. They purchased an

5.

interest in Sayers & Scovill in 1938. When the heirs of Sayers and Scovills decided to close the company at the beginning of World War II the Hesses and Eisenhardts

purchased the assets and it became Hess & Eisenhardt. At that time they opened plants in Rossmoyne, Ohio and Reading, Ohio.

Mr. Hess never got around to inviting me to tour the factory, but a lucky set of circumstances made up for this. I had the opportunity to care for the daughter of one of the owners of the company who succeeded Mr. Hess. He was so pleased with her care that he asked if there were anything he might do for me in return. I asked that I might visit the Hess & Eisenhardt factory, and he was only too happy to arrange it. Upon entry the atmosphere was quiet, organized, and spotless. I was shown each area of planning, design, parts manufacture, and assembly as well as the final check-out of a given vehicle. To the novice, the vehicle emerging from the process of modification looked unchanged from when it entered.

The main products of the company at this time were ambulances and hearses manufactured under the Sayers & Scovill trademark. The first product under the Hess and Eisenhardt name was an airport coach - in reality a modified hearse. They also manufactured military vehicles, trailers, and special vehicles for the army.

In 1950 the Secret Service reacted to the attack on Blair House by commissioning a vehicle to protect President Truman. Hess & Eisenhardt had developed techniques of armoring after experimenting with military vehicles. The reputation developed with these techniques led to Hess & Eisenhardt being called upon to build limousines for the president and for

6.
other countries including the United Kingdom, Jordan, and Greece.

The concept of design and production of a luxury vehicle to be used as a mobile fortress

was unprecedented. It was necessary to start from scratch by finding and/or modifying vehicles, and including in their structures protective shields suitably disguised. Each car was brought to the factory and fastened to a special railway mechanism which allowed it to be sawn in half with the front and rear parts kept closely aligned. Between the halves a new passenger section was built and inserted. When the extended skeleton was complete the protective covering was begun. In the early days the only material available for armoring was steel. This was incorporated extensively but was to handicap the mobility by its excessive weight. In addition to protection of the perimeter it was necessary to fortify the engine compartment, battery, and wheels and tires, all initially accomplished with heavy steel sheeting. Development of materials such as Nylon, Lexan, and Polycarbonate have enabled new lighter weight construction without sacrificing the level of protection. These, as well as other classified products are included in the structure of the new limousine currently being built.

Hess & Eisenhardt as a separate corporation began in 1938 and was purchased by the O'Gara Companies in 1982. At that time the O'Gara brothers were Hess and Eisenhardt's international sales agents. The company expanded business in areas including automobiles and cash transport trucks for the civilian market. They also built armored personnel carriers, mobile water cannons, and they supplied armor for the Humvee. In 2001 the company was taken over by Armor Holdings. Over the next decade the company assumed

7.

several different names and owners emerging as the Centigon Security Group, which it is today. It has five factories around the world, and a separate factory dedicated to the manufacture of bullet-proof glass. In 1986 Hess & Eisenhardt began a relationship with Jaguar Motors to build high performance, custom sports cars, building 850 over a

three year period. In addition to Jaguars they modified and customized other cars over the same period on an individual request basis.

The most famous presidential limousine is the 1961 Lincoln Continental built by the Ford Motor Company and Hess & Eisenhardt. It was built for John F. Kennedy. It was designated X-100 by the Secret Service, and was soon named The Beast. It was leased to the government for \$500 per year. At the time it sold for \$7347, but with modifications it cost nearly \$200,000. Special modifications included: removable steel and transparent plastic roof panels, hydraulic rear seat that could rise ten inches, massive heating and air conditioning, retractable steps for Secret Service agents, jump seats for extra passengers, two radio-telephones, and interior floodlights.

After the assassination the car was immediately impounded by the Secret Services but was returned to Hess & Eisenhardt in December, 1963. Extensive rebuilding and further modification included: re-armoring of the rear passenger compartment, addition of "greenhouse" non-removable top, new engine additional communication devices, and additional air conditioning. In 1967 major modifications to the body were carried out with the roof being changed to permit the President to stand during parades. This car remained in service until 1977 even though other limousines were built for 8.

Presidents Johnson, Nixon, Ford, and Carter. Eventually the car was moved to the Ford Museum in Dearborn, Michigan where it remains.

Along with the limousines the President also has at his disposal two custom-designed buses. Their main use has been for rural campaign trips in relative comfort. Each bus

is reported to be 45 feet long, and is equipped with captains' chairs and a couch. It also has available food and drink, as well as extensive communication capability. This inclusion in the fleet of vehicles replaces the need for temporary arming and equipping rental buses as was the prior routine if buses were needed. These buses are also used by the Vice President and other members of the White House staff. The first buses cost \$1.1 million each in 2011.

Whenever the President travels he does so in a caravan of varied vehicles. Some of the vehicles may have code names, while others may not have specific designations. There is always a contingent of local police vehicles preceding and following the President. There is a spare identical limousine acting as a decoy to confuse observers and potential villains. These vehicles are followed and/or led by SUV's carrying Secret Service agents not riding in the limousine. In close proximity is an electronic countermeasure vehicle designed to deter a guided missile attack. There is a counter-assault team nicknamed "Hawkeye Renegade" prepared to deploy and defend the Presidential party if necessary. Seldom discussed is a "hazardous material mitigation vehicle" with sensors to detect chemical, biological, or radiologic threats. There is a communications van which augments the

9.

limousine's instruments to assure clear channels of communication in transit. The back of the line is brought up by an ambulance which has rehearsed all routes to the nearest hospital or medical facility. At the end are press vans for local and national press.

While en route Secret Service agents drive in varied patterns, weaving and changing the order of vehicles so that a fixed pattern is avoided. Agents receive extensive training at

the Rowley Training Center to perfect complex driving techniques. The driving patterns, the admixture of vehicles, and the placement of the President are all based on the threat assessment of any location by the advance team of the Secret Service. The President enters no location which has not been thoroughly inspected before his arrival.

The cost of previous Beasts is not available to the public , but is believed to be significant.

A replacement limousine is currently under development by General Motors, and should be delivered soon. Current estimates of the costs of development are in the range of \$15 million.

What this cost includes is not specified. There are several Beasts to be built estimated to cost \$1.5 -2 million, each. The cost of the new vehicles will be but a drop in the bucket of the cost of protecting the President, estimated at several hundred million dollars annually.

Items from the FY2016 budget for the Secret Service protective mission include: 2016 Presidential Campaign @\$123.5M; Former President Obama Protective Detail \$25.7M, and Protective Mission Enhancements at the White House \$86M. The government and the electorate have repeatedly affirmed the value of the expenditure, and Congress routinely allocates the funds. If this precedent continues, future presidents will travel comfortably and and securely in a sanctuary whose doors close with a loud “thunk”.