

SUMMARY OF EVIDENTIARY HEARING

1991 BOMB CONFIGURATION

<u>Explosive/Main Charge</u>	<u>Firing/Initiation</u>	<u>Fusing Section</u>
1991	1991: 2 electrical blasting caps in contact with main charge or explosive material. EV-94 (Wascom using Govt.Ex. #20)	
1991:High explosive charge was DYNAMITE (estimated at 2-3 sticks. EV-106)	Blasting caps go into high explosives charge. EV-95	
Dynamite wrapped in a magazine then wrapped in tape. EV-105	2 electrical Rock Star detonators--each has two wires, a plug, a factory crimp, an aluminum blasting cap housing. Ev-99	1991: fusing circuit is REMOTE CONTROL SYSTEM which is the brand FUTABA consisting of 4 AA batteries which provide the power source for the receiver system and for the servo system. Futaba is a purchased kit which comes with a battery container connected to a slide switch (a power on power off switch) which protects the batteries when you are not wanting to use the device. It has a receiver which receives a signal on its antenna and then sends an electrical signal by wire to the servo motor, which is a small electrical motor that when power is applied turns one way or the other. EV-95-97
Cannot determine the exact number of sticks of dynamite; must be estimated by looking at the effect of the explosion on the surroundings (small crater in driveway) and the size of the box b/c that restricts the amount of explosives. EV-106	1991 device initiated by receipt of radio signal by the receiver or remote control system. EV-95 Energy comes from the 5 9-volt batteries that were connected in series in the firing system--TOGGLE SWITCH prevents power from flowing from batteries to detonators and back to the battery. EV-99. Wascom found the internal contacts	

Explosive/Main Charge

Firing/Initiation

Fusing Section

that are used to make or break the circuit inside the toggle switch, and by the laboratory report the contacts come from a **Radio Shack Toggle Switch** (single pole, single throw - made for one item not multiple) EV-103

The contacts where the wires were connected were **soldered** (Wascom testified that there are other ways to connect the wires to the contact point - taping or twisting) EV-104

Basically, purpose of fusing circuit is to receive a signal from the remote control and pass the impulse along and produce physical movement. EV-97

Servo motor (small electrical motor with arm called "horn" attached) is directly adjacent to the toggle switch, and the servo motor moves the arm to turn the toggle switch on to allow current to flow through the firing system. EV-98

1986 BOMB CONFIGURATION

Explosive/Main Charge

Firing/Initiation

Fusing Section

1986 Explosive system - M-21 Hoffman device, electrically initiated. EV-110

M-21 Hoffman device is made of white plastic, inside is transparent plastic container with explosive material and electrical initiator placed in contact with fuse. Called a "quick match" - very fast burning fuse. EV-11

Conductor power sources and switch

Electrical system so conductor was there, 2 six-volt power sources with toggle switch. EV-112

RELAY (a switch) in system - not strictly an on and off switch, can be used also to transfer energy from one circuit to another working on the principle of electrical magnetism. EV-113

1986: Remote Control system (TYCO) used as a safety between 2 switches. EV-184 (Redirect)

Components = batteries and battery pack; a slide switch or on/off switch; a receiver with antenna and switch that causes device to function. EV-112

Explosive/Main
Charge

Firing/Initiation

Fusing Section

The relay is used
to fire the
system. That is,
to allow powder to
go to explosive.
EV-184 (Redirect)

SIMILARITIES BETWEEN 1991 DEVICE AND 1986 DEVICE
ACCORDING TO WASCOM

The fact that soldering was done to connect the electrical wiring. EV-116

The way the connections were taped or also the way the components were bundled (could have easily glued them or constructed portion of box to hold explosive) ... Wire ends twisted, soldered and taped in 1986 device. EV-117

[Notes: Isn't this just generic? How do you establish a pattern of 2?]

Both remote control with power sources that provided power to fusing system. EV-118

Both "hobby type" remote control. 1986 comes out of remote control car. 1991 is a separate system where a person would build their own car and just employ a manufactured remote control system. EV-118

Both had slide switches which is power on and off switch for remote control. EV-118.

Both had receivers and antennas. Ev-118

Both had a switch and motor that would do a physical action when this remote control system was energized. EV-118.

Explosive system: Not exactly the same in 1986 (M-21 Hoffman) and 1991 (blasting caps and dynamite) -explains difference to fit what he wanted to accomplish -- cause an incident vs. kill. Ev-119

Both placed underneath vehicles using round magnets. 1991: two large circular magnets and smaller round donut magnets. 1986: one large donut magnet. Explains difference in number of magnets by greater weight in 1991 device. EV-120

Toggle switch was in the firing circuit of each (which Wascom says is the only logical place to put it). Dual purpose of toggle switch--it can be used to fire th3 explosive material to allow current to flow through it and cause functioning or it can be used as a safety to prevent the explosion until person is ready) 1986: more expensive toggle switch, double throw, double pull

1986: presence of test lightbulb. 1991 device: at point of purchase a package of two test bulbs

Wascom testifies on circumstantial evidence of modus operandi. Finds significant fact that device remote controlled improvised explosive device that was designed and constructed as a product of a conspiracy to build and use such a device, for application to motor vehicle operated by someone with ties to another in conspiracy, utilized someone else to acquire electrical components including light bulb. Ev-122-123

Relies also on EXIS statistical evidence and considers significant that only two found with similarities and those were 1986 and 1991 bombings. EV-123-125

CROSS EXAMINATION OF WASCOM

September 1, 1986: M21 Simulator Flash Artillery - used to simulate the acoustic bang and optical flash and smoke signature of tank main gun. Training aid for combat; gives them effect of firing gun. EV-126

Purpose of M21 Simulator was not to blow up the truck but to create a bang and optical flash and smoke. EV-132

Defendant's Exhibit 1 (same as Govt.'s Ex. 12) - Explosive Technician Leo Voght (now deceased) of Division of Fire Prevention states that the explosion was an artillery simulator often used by the National Guard. EV-134

An artillery simulator is non-electric; it uses a pin in a pull friction type ignitor. EV-134

Hoffman M-21 has cardboard inside the plastic housing. (Seigal makes a distinction b/t M-21 Hoffman and M-115A1, which is also mechanically detonated). EV-136

1986 - Government's Ex. 40 shows lightbulb with wiring device (not found physically in device, but put there by Wascom to show where it would have been put. Purpose of lightbulb is testing. Also put a relay in 1986 device b/c believes there was a relay in the 1986 device based on handwritten, undated notes by Officer Lanergan. WASCOM NEVER SAW ANY OF THE PHYSICAL EVIDENCE. EV-138-142

Wascom relied on three police reports (two reports and Hankard's examination) to create a mock-up of the 1986 device without having ever seen any of the physical evidence associated with the 1986 device. EV-142-144

Wascom agrees with Kline's statement that the main charge in the 1986 device is a pyrotechnic simulator/artillery M21 versus dynamite for 1991.

Initiator/Detonator: Agrees that electric initiator with built-in quick match was used for 1986 versus electric detonator - two Austin Rock Star No. 6 Delay blasting caps - used for the 1991 device. And agrees that they are dissimilar types of explosive main charges. EV-145-146

Fusing Systems: Say they are the same type of system. EV-146-146

Power Source: 1986 device and 1991 device used for AA batteries that was the same type and same size and they both

used a battery holder that held those four batteries so that would be similar. The difference comes in with the number of batteries. Other batteries other than the four AAs that were in each device. The two 6-volt batteries in 1986 and the five 9-volt batteries in 1991 are different sizes but used for the same purpose. EV-147

Double pull, double throw toggle switch is different than the toggle switch in the '91 device. EV-149

The remote control system itself (circuit board for the remote control, relay, slide switches, and batteries) were wrapped together in duct tape in the '86 device versus the only thing wrapped in duct tape in the '91 device was the dynamite which had the blasting caps in it. EV-151-152

1986 device attached by way of a large circular magnet under a truck versus (large circular magnets which were not speaker magnets?) and 12 button magnets and two ring magnets in the 1991 device.

In the 1986 device wires were connected to batteries by solder with no clips versus in the '91 device the wires were connected to the batteries by snap connectors which were soldered to the wires and then clipped to the 9-volt batteries. EV-154

1986 device uses a double throw toggle switch which is not from Radio Shack versus 1991 device being a single throw toggle switch from Radio Shack. EV-155

1991 device - two different methods of wire connections, some were twisted and taped and others were twisted, soldered and taped. EV-161

The 1991 device was concealed in the plywood box which was nailed, glued and painted black. EV-162

The 1986 device was wrapped in silver duct tape. EV-162

No adhesives used in the 1986 device but Crazy or Super Glue used in the 1991 device. EV-163

Wascom says that his opinion as to why the devices had signature quality was the method of construction. For example, the wrapping of the components with duct tape was an element in that determination, the location where the device was placed underneath the vehicle, the materials used in the device, materials such as duct tape to contain or hold components, soldering of connections made within the device, the magnets used to hold the device in place -- all of the elements together. EV-167

Wascom admits that there was no particular signature element about the duct tape, that he had seen soldering used before and that it was not unique; that no lamp was found in the 1991 device but that the notes of Officer Lanergan state that Trenkler tested the '86 device with a lamp. EV-169-170

REDIRECT EXAMINATION OF WASCOM

Wascom does not attribute great significance to the differences in the type of remote control, i.e. that the 1991 device uses a Futaba remote and the 1986 uses a Tyco remote because they function the same way. They are both remote control systems even if one has a relay and the other has a toggle switch. EV-182

The double throw versus the single throw toggle switch makes no difference to him with respect to the signature analysis. It doesn't matter either that the toggle switch was used to fire the device in the 1991 device (it was the actual switch that allowed power to go to the explosive and function the explosive) and that in the 1986 device it was used as a safety because both are in the firing circuits. Both perform the same turning off and on function. **[BUT HE ADMITS THAT THE TOGGLE SWITCHES WERE USED FOR DIFFERENT PURPOSES]**. EV-183-184

* Note: A Shau's Gvt Expert (Hansen) pp 15-234, 241
from US v SHAW date a good job

DIRECT EXAMINATION OF DENNY KLINE

of outlining
dissimilarities

It is Denny Kline's opinion that the '86 device and the '91 device possess many similarities between the generic components of the bomb. These include a radio control system, the use of a battery power source, the use of a toggle switch, the use of tape. "There is a possibility, a probability, that maybe there is a connection between the maker of these two bombs. "...there is nothing in this particular analysis and comparison I've made that suggest to me that the same person made both devices. ...overwhelming number of dissimilarities that exist between the kind of components, the way they were assembled and the manner of assembly that it leads me not to conclude that the same individuals made both devices. The motive appears to be different between the two; the level of criminal sophistication in the 1991 device does not seem to exist in the 1986 device. EV-200-202

Explosive/Main Charge

Firing/Initiation

Fusing Section

1991 - high explosive which has been identified by the ATF as dynamite. EV-204

1991 - 2 detonators, called "dual priming speaks of criminal sophistication

1991 - radio control system which is a Futaba

1986 - a pyrotechnic device fabricated or commercially manufactured used for Army training purposes. EV-204

Different numbers and different types of batteries were used as the power source for the firing circuit.

1986 - a Tyco radio car that's been disassembled. Has 75½ inches of gray insulated wire which is used for an antenna -- unusual according to Kline. EV-205

The toggle switch were of a different types. There is nothing singularly unique about the components that were used. The toggle switches are uniquely different and serve different purposes.

1991 - While both power sources were identified as having four AA batteries in the fusing system the Futaba comes with a separate component and a rechargeable power pack or a battery pack can be purchased and four AA batteries go in it versus the 1986 device which has a built in receptacle

for four AAA or four
AA batteries which is
the way it comes.
This is not
specifically unique.

1986 device: the
toggle switch was
used to arm the
system or to check
the circuit.

1991 device: the
toggle switch was
simply used as a
button to cause the
bomb to explode; it
was a trigger.

Client testifies that he knows for a fact that other bombs have
been made using the same type of materials, round magnets,
Futaba radio control system, toggle switch, two detonators.
These are generic similarities. EV-211-212

CROSS EXAMINATION OF DENNY KLINE

(Apparently Denny Kline filed an affidavit before he knew that both devices had wires that were twisted, taped and soldered and then issued a second affidavit to correct what he then learned about the wires.) EV-222-223

Denny Kline indicated in his first affidavit that wires that are twisted, soldered and taped are singularly unique. EV-224

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