



DuMont Telecruiser

It Provided Remote
Television Broadcasts
Long Before the
Days of Satellite
Transmissions. And It
Now Provides Some
Major Challenges
for a Restorer.

By David W. Temple

EW ENTHUSIASTS TAKE On the Herculean task of restoring a 1940s/50s era bus. They require a LOT of space and are much more expensive to restore simply because of their bulk which results in increased labor to perform tasks such as body and paint work. Most of those which are refurbished are not restored to their original state, but rather modified to serve as motor homes.

Owner Chuck Conrad's goal, however, was to restore the interior of this Flxible bus to its early 1960s configuration as a DuMont Telecruiser. His personal interest



Instrumentation included an air pressure gauge for the air brakes, a tachometer and temperature, fuel and oil pressure gauges.

in such a vehicle dates back to his days of working for Channel 4 in Dallas; he remembers remote units such as our featured example quite well.

This is not his first bus project, but the others were converted into motor homes. His latest bus, though, had too much history attached to it and too much of its original equipment to seriously consider a conversion instead of a restoration.

Conrad, of Chalk Hill, Texas, is the former president of the Classic Car Club of America and is owner of Chalk Hill Communications, LLC, a commercial radio station (KZQX-FM) broadcasting an eclectic mix of music from the 1940s to the 1960s. The station's motto, "Home of America's Original Classics," is fitting for more than one reason—in addition to the retro music he provides, Conrad has owned a variety of vintage automobiles over the years. Among the vehicles he currently owns is a 1912 Buick Model 34 Roadster.

In the Market for a Remote Broadcast Unit

The road that brought Conrad together with the featured bus begins in 1972 when Dallas television station WFAA sold their aging Telecruiser at auction. The high bidder at \$750 was Dallas resident Edward Terry, who planned on converting it into a motor home, but never did. He did use it as "a sort of traveling store, visiting numerous flea markets with it," Conrad said.

Conrad was led to the Telecruiser through his other hobby of collecting vintage TV cameras from the early days of television. Conrad had purchased two TV cameras from a broadcast museum that originally were operated by his old employer, Channel 4. He posted photos of them on his website, telecruiser.com, which came to the attention of Gary Mack, curator for the Sixth Floor Museum. (The Sixth Floor Museum, of course, is the location in the Texas School Book Depository where Lee Harvey Oswald waited for President John F. Kennedy's motorcade on November 22, 1963.)

Mack contacted Conrad to request the use of one of his vintage cameras for a special museum exhibit. During a subsequent visit to the museum, Conrad's wife Diane

offhandedly remarked that her husband would like to acquire an old TV remote broadcast unit.

Ironically, Gary Mack happened to know of one for sale which needed restoration—our featured example.

Most of the electronic components from the bus were stored in a spare bedroom of Edward Terry's home and were included in the sale to Conrad. However, the original DuMont equipment was gone because the bus had been updated in the early 1960s with newer Marconi cameras as well as Conrac, Tektronics and General Electric equipment.

Once Conrad acquired the Telecruiser, he used a flatbed trailer to transport it some 130 miles from its storage lot in downtown Dallas to his home in Chalk Hill where he was ready to start the project.

But before we go to work, let's take a look at the history behind what turned out to be a television pioneer.

A Flexible Approach to Business

The Flxible Co., builder of the featured vehicle, can be traced to Hugo Young who sold motorcycles in Mansfield, Ohio,

a century ago.

In 1912 he developed and patented a design for a motorcycle sidecar which would allow the wheel underneath the sidecar to tilt so as to stay on the ground when the motorcycle would go around a curve. His sidecar was attached to the motorcycle via a flexible connection.

The following year, Young founded the Flxible Side Car Co. in Loudonville, Ohio, where the new side car was manufactured. ("Flxible" reportedly was chosen because "Flexible" was too generic.) In 1919, the company's name was changed to The Flxible Co.

By the early 1920s, competition from the automobile-mainly Ford's Model T-drastically decreased demand for the Flxible sidecar, and the company had to shift its focus to stay in business. That shift

By the md-1960s, Flxible ended production of funeral cars and the 29-passenger Starliner. In 1970, Flxible was purchased by Rohr Industries, another transit coach producer. Eight years later Flxible was bought by Grumman Allied which was followed by another change in ownership in 1983 when General Automotive Corp. acquired the company. General Automotive continued producing the line of Grumman Metro buses until it ceased operations in 1995.

Now, About DuMont

DuMont Laboratories, an early pioneer in television technology, was founded by Allen DuMont in the early 1930s.

In 1931 DuMont improved the design

of the cathode ray tube for use in television re-



tion began as a primary affiliate of the DuMont Television Network and briefly, a secondary affiliate of the Paramount Television Network.

KBTV was founded by the Lacy-Potter Television Broadcasting Co; the latter partner, Thomas Potter, was an East Texas oil man. In March of 1950, the A.H. Belo Corp. purchased KBTV for \$575,000 and days later the call sign was changed to WFAA and it remains in operation today.

Prior to KBTV's first broadcast, the company spent \$94,000 on a DuMont Telecruiser—a 1949 Flxible Clipper outfitted with DuMont Labs equipment for use as a remote television broadcasting unit. Also known as the Golden Telecruiser, it was the first of its kind in the United

> States. Among the KBTV staff charged with looking after the Telecruiser's equipment was chief engineer Morris Barton, Jr., formerly a development engineer for DuMont Labs.



was to buses, funeral cars and ambulances. (Their first bus was a stretched 12-passenger Studebaker sedan.) The company was successful and in 1939 Flxible introduced its Clipper, a 29-passenger coach powered by a modified Buick straighteight. A glass-top version was offered for a year. use in national parks such as Yosemite.

During World War II, Flxible produced components for Goodyear military blimps as well as aircraft parts.

With the war's end, Flxible resumed production of coaches and released a more streamlined Clipper. The VisiCoach, an enlarged version of the Clipper, featuring larger windows and a larger engine compartment, went into production for 1950. About five years later, the VistaLiner was offered. Among its improvements were an independent suspension system and air conditioning. Other models were soon released such as the Starliner and FlxLiner. For 1961, the New Look coach entered production and served as the industry standard for nearly two decades.

ceivers. Seven years later, his Model 180 television receiver was the first all-electronic commercial television set—beating RCA's version by nearly

In 1946 DuMont founded the DuMont Television

Network. He also continued to produce television sets through the 1940s and '50s.

The DuMont Television Network was not among Allen DuMont's successes, however, due to increasing competition from other, larger networks such as CBS and NBC. After one decade of operation, he sold the company to John Kluge who named it Metromedia. In 1960, DuMont sold his television manufacturing company to Emerson Radio.

The Telecruiser In Its Working Days

On September 17, 1949, KBTV Channel 8 began broadcasting in Dallas. The sta-



A walkway with anti-slip rubber is on top of the bus. From here cameras could be set up for broadcasts. When the walkway was in use, a protective railing was installed to keep crewmen from falling. Brake lamps show the word "STOP" when lit. Three round tail lights were used. One of these had to be replaced and was found on eBay. This electrical panel is positioned outside by the main entrance door. It was for microphone and telephone connections.

One of the earliest assignments for the Telecruiser was a broadcast from the Cotton Bowl where Southern Methodist University and Notre Dame met in the final football game of the 1949 regular season.

Perhaps the most historically significant use of the vehicle, however, was in November 1963 when it was used to broadcast the funeral of Dallas police officer J.D. Tippit who was shot by Lee Harvey Oswald in the Oak Cliff section of Dallas approximately 45 minutes after the assassination of President John F. Kennedy. It may also have been used for remote broadcasts about the Kennedy assassination as well as the shooting of Oswald two days later, but there is no conclusive proof for either possibility.

The Restoration Begins

Work on the large relic began not long after its arrival in Chalk Hill. Among the early chores performed with help from Conrad's friend John Morgan was the removal of an air conditioning unit which was installed on top of the Telecruiser around 1965. The A/C system, attached by hundreds of sheet metal screws, was large and heavy, and required a crane and forklift (supplied by Morgan) to remove it. With it went some unattractive external duct work. Incidentally, the bus'

Telecruiser was "very challenging," said Conrad, and "it would have been better to have pulled the engine and transmission out as a unit."

The Spicer clutch was taken to a shop in Tyler, Texas, but the last employee familiar with those clutches had passed away about a year earlier. So it was sent to another shop in Dallas—all for a \$14 throw-out bearing,

The Telecruiser was originally equipped with two 35-gallon fuel tanks with an AC-brand electric fuel pump for each. Both tanks and fuel pumps were beyond repair, so Conrad had a fuel tank fabricated—an expensive approach. In tank in place, probably from a boat.)

With these matters remedied along with a new set of tires, the Telecruiser was at least mobile again.

Living Large Does Have Its Challenges

Body work and interior refurbishment remained, however. Conrad found a tremendous amount of plastic filler in the rear of the bus which shows that running in reverse, with its obvious lack of visibility, must have been quite demanding and occasionally hazardous.

Fortunately, there wasn't much corrosion, as only the lower six inches of











suspension was not really up to carrying the extra weight of the air conditioning. the unit caused the front of the Telecruiser to sit a bit closer to the road resulting in some unusual handling characteristics.

Next, the process of getting the Telecruiser mobile began. Surprisingly, the gauge for the air brakes read 20 pounds and, indeed, that proved to be accurate-surprising because the vehicle had not been run in about two decades. Linkage for the shifter and accelerator had seized, though, due to a leak from one of the 28 coolant hoses of the cooling and heater system.

The Telecruiser's original Buick straighteight was still in place and did not require a rebuild thanks in part to having logged only 16,000 miles since new. A small hole in the oil pan (probably the result of the added weight of the A/C unit and resulting decrease in road clearance) did require a repair and the throw-out bearing for the transmission needed replacement. Removing the transmission from the The equipment racks were completely recreated as the originals were long gone. Most of the electronic systems are now in perfect working condition. Note the rotary telephone at the director's desk. This desk, as well as the one next to it, the audio man's desk, had to be rebuilt. Here's a look at the backside of the 1960s vintage electronic systems attached to the rebuilt equipment racks.

fact, because of the expense involved and no need to carry a total of 70 gallons of gasoline, he had only one tank crafted and obtained a new electric fuel pump. In regard to the original tanks, Conrad described them as being "like lace curtains" after they were boiled out. Many years earlier each had been crudely repaired with a plastic coating which eventually cracked. The old gasoline still in the tanks had long since turned into thick "molasses-like goo," said Conrad. (The previous owner had dealt with the bad fuel tanks by rigging a five-gallon

the control room entrance door had to be replaced. Conrad believes this door often stayed open for ventilation even during rain storms. Without any drain holes in the bottom of the door, water remained trapped, thus rusting out the lower portion. A new battery box also had to be fabricated.

Finding a body shop willing to take on the task of restoring the original exterior appearance of the Telecruiser also was a bit of a challenge. The first shop chosen went out of business while in the process of sanding the bus. Conrad then contacted Fishburn Auto Body in nearby White Oak which agreed to the enormous task. Not many local shops are even large enough to handle the Telecruiser.

The original chrome-plated bumpers proved to be another somewhat complicated matter. They were "mangled," Conrad said. Each was composed of three sections welded together. When speaking with a representative of the chrome-plating shop chosen to repair the bumpers, Conrad was told that he would spend a lot of money and prob-

ably not be satisfied with the results. Each bumper would have to be cut apart into its constituent three parts to chrome plate. Then the re-plated components would have to again be welded together which would damage the chrome. Though Conrad could have searched for a shop which could provide a chrome finish for the bumpers—after all, it had been done in 1949—he decided the thousands of dollars of expense and the effort were not justified.

These buses also had bumpers painted black and black paint would match well with the original colors of his Telecruiser, he reasoned. Therefore, the shop was hired to straighten the bumpers and prime them.

Refitting the Interior

Most of the wood inside the Telecruiser was rotted. Furthermore, the equipment racks were gone.

New plywood was used to form the seats—a relatively easy task.

The equipment racks were more complex and time consuming. Conrad explained the process: "They were built from standard rack rail components which are still available from a number of suppliers. They are bent and formed steel (about 8-gauge) and drilled with hundreds of 10-32 screw threads. It is one item that hasn't changed much over the years. Because the bus has a curved ceiling, cutting and fitting the components turned out to be a lengthy process. There was quite a bit of trial and error involved. Once the base and rails were installed and securely fastened to the bus frame, then the spaces are filled with either blank panels or electronic components. Lastly I built the counter top that is attached to the racks. The director's desk and audio man's desk had to be built as well. When I got the bus, they were missing, but where they had been was clearly visible, so it was relatively simple to reproduce them."

The repairs to the electronic gadgetry installed in the equipment racks were another time-consuming process. Even though this equipment is 1960s electronics, not the original 1949 components, all the monitors and other items are at least 50 years old and all of it had to be repaired. At present, one monitor has a vertical roll that still must be remedied. At least 100 capacitors (capacitors are usually what fail first) have been replaced along with several picture tubes, rectifier tubes, and a lot of other components.







Clockwise from the top: The Flxible Company of Loudonville,
Ohio, which built our featured Clipper and outfitted it as a DuMont
Telecruiser, mounted this large, somewhat elaborate emblem on the
front of the bus. The original station call letters, KBTV, were carefully recreated by the owner of this 1949 Telecruiser. The DuMont
Television logo was attached just above the front license plate
mount as well as above the rear license mount.

Furthermore, everything had to be rewired and there is still more to do. Conrad noted, "Making the electronics work has been almost as big an issue as getting the Telecruiser running."

For example, among the work stations on the coach to be restored was the Remote Engineering Supervisor's desk. He was responsible for video quality and in charge of getting the signal back to the studio (which usually involved setting up a microwave link). He also made sure that brightness and contrast (exposure) was correct for each camera.

"My first paid job (in high school) was at a TV repair shop in my hometown," Conrad said. "A lot of the things I learned there have turned out to be very helpful. Most of the equipment in the Telecruiser is similar to what I worked on back about 1963-65. It is amazing what comes back to you."

Desktops, Flooring and More

Most of the interior Formica was still intact, though with a slightly yellowish pa-

tina from years of exposure to journalists' cigarette smoke. However, two pieces had to be replaced. If exact or closely matching patterns could not be found, then the only option was to replace all of it with as close a match as possible. Fate was on Conrad's side, though. He first tried a local laminate warehouse to source the needed Formica. The salesperson to whom he spoke had clearly been in the business for many years judging by the fact that she immediately recognized the pattern (something like "snowflake").

ivory" as Conrad recalled).

A check of inventory records—on old-fashioned note cards—at first gave Conrad some hope that he soon would be on his way with the new material, as just enough was recorded as being in stock. Checking the bin, though, proved the record to be inaccurate as none was found.

Still, there was one more possible source—Wilson Art in Temple, Texas. They made the small run of two sheets for Conrad at only \$10 above their standard charge. Aside from not having a light patina like the original smoker-aged Formica, they are a match.

Bus flooring was of commercial grade tile, and some of the original pieces were missing and others were broken. Luckily, the tile is still in production.

Restorers often have to restore the steering wheel or find a suitable replacement. In the case of

the Telecruiser, it had not cracked and cleaning was all that was necessary.

Instrumentation was good, for the most part, though the electronic Sun tachometer was not functioning. Repairing the tach remains on the "to do" list. In addition, Conrad said the dashboard looked as though it had been "repainted with a broom," and had to be refinished.

Parts Availability

Finding replacement parts for a bus such as this one is generally challenging at best. For example, replacing a windshield could very well mean having one made. Luckily, the divided windshields did not need replacement. A few components are still fairly common because off-the-shelf parts were used by Flxible. As mentioned, a Buick straight-eight powers this Telecruiser. Conrad found the engine gaskets he needed from Bob's Automobilia in Atascadero, California. Door handles appear to have been sourced from Buick, too. Headlight trim is the same as



on late-'40s/early-'50s Chevrolet trucks.

About the only other sources for parts, though, are eBay and major swap meets. Conrad obtained a missing tail light lens on eBay with a high bid of \$160.

On the plus side, his bus was nearly complete, so parts-hunting was minimal.

The Telecruiser's Future

At present, Conrad is allowed to license his Telecruiser but cannot legally drive it on public roads as it does not meet cur-

rent Texas Department of Transportation safety specifications.

The hang-up is that it is classified as a passenger bus, but does not meet the literal definition of a bus as it will not transport a quantity of passengers. The state of Texas also says it is too heavy to be licensed with antique plates like a car or pickup. Conrad is currently working on getting this situation remedied with the state.

Eventually, Conrad expects his bus to



The streamlined contours of the Telecruiser are evident in this view. Its engine is mounted in the rear and can be accessed via the panel at lower center. A scoop at the upper rear of the bus provides cooling air for the radiator. Note the steps formed into the rear of the Telecruiser just above the bumper and the hand grips used to reach electrical plugs along the top. Above: Shrouds around the 320 cid Buick Straight-8 contributed to engine cooling.

become an exhibit in a broadcast museum—one he is attempting to establish himself. O

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