HEAT-TIMER® CORPORATION

CASE NO. 08

BUILDING TYPE: *Apartment*

NO. OF UNITS: *30*

LOCATION: *2550 Creston Ave*

Bronx, NY.

Owner Shaves 1/3 Off Fuel Bills with MPC Gold Series and Remote Communications Controls

PROBLEM: The fuel bills for the three Apartment Buildings at 2550 Creston Ave. in the Bronx were so high that the owner could scarcely afford to heat them. In fact, Joel Gendels of JMG Management Plus, was considering *selling*.

Older, inefficient boiler controls had resulted in excessive overheating in all three apartment buildings. In mid:. winter, indoor temperatures typically ranged from 85 to 88 degrees. When tenants got too hot, they simply raised their windows, relinquishing thousands of dollars of heat to the New York winter. By 1995, Gendels was spending approximately $40,000.00 *per year* to heat the buildings! That's when he decided to contact Marlande Heating Corporation for help.

SOLUTION: Al Michitsch of Marlande Heating Corp. suggested that Mr. Gendels take control of his fuel consumption by installing a Heat-Timer MPC-Gold Series Control with Remote Communications. Mr. Michitsch had successfully used the Heat-Timer controls to solve similar efficiency problems before. In fact, he was so certain that Mr. Gendels would be satisfied, he actually provided the Remote Communication feature at no up front cost. Knowing that onceJMG Management experienced the convenience of having access to their system at their fingertips, he would want the same control package at other properties.

How It *Works:*

The MPC Gold Series control regulates boiler operation based on outdoor temperatures. The control automatically calculates how much heat is required to maintain indoor target

temperatures under various *outdoor* conditions. The boiler only operates when heat is required, so less fuel is consumed. Applying the MPC Gold Series control typically results in a 10-15% drop in fuel bills.

The Remote Communication system comes completely equipped to communicate with any computer or terminal with a modem. To set up the MPC with remote communications, all that must be done is to plug a phone line into the MPC's phone jack. All the information and software is contained in the MPC. The computer or terminal calling the MPC does not need any special Heat- Timer software, any standard @odem program will work. By calling up the system, you can monitor boiler operation, space temperatures, and adjust the system based on data which the system stores in memory. The operator can literally call up the system from anywhere, any time.

The best part about the Remote Communication package is that it typically saves the owner at least an *additional* 10% over the savings produced by the MPC control alone. This is because this system permits a higher level of fine tuning. The control is linked to sensors throughout the building which provide it with data on space temperatures vs. target temperatures. Based on this information, the controller makes continuous adjustments to the MPC for even greater efficiency.

AI Michitsch of Marlande Heating Corp. monitoring a Heat-Timer Control System from his office.

According to Mr. Michitsch, an operator can get a feel for how effective the control is by accessing the operational space temperature history report (which this system automatically maintains for 28 days).

"You can look at these history reports and see how often the systems are on '~pace lockout'," says Michitsch. This indicates that the target space temperatures are being maintained without the boiler coming on.

Controls Render Dramatic Savings

Marlande Heating installed 4 ambient space sensors on the two top floors of each apartment building. These sensors provide information to the control, so it can continually adjust itself to maintain target temperatures. A sensor was also installed to help monitor domestic hot water temperatures - another area in which an owner can conserve fuel.

Marlande used the control to set and maintain separate day and night target temperatures for maximum savings. The goal was to maintain 71°F during the day and 64°F at night. Since this was such a departure from the +80°F temperatures the tenants were accustomed to, Mr. Michitsch *gradually* lowered the target temperatures, giving the tenants time to adjust.

The controls were installed in Spring of 1995. By November of the same year, Mr. Gendels could see the dramatic impact of the Heat- Timer controls. His fuel bills for the month of November were 33% lower than the, previous year! The increased cash flow enabled Gendels to maintain ownership of the buildings. Mr. Gendels installed this same system in the adjoining two buildings. The successful installation also led him to investigate installing the same control package at other properties.

Sophistication Without Intimidation

This wasn't Mr. Gendels first experience with a multi-sensor control system. When asked to compare the MPC-Gold Series control to other controls, he says the Heat- Timer performs similarly; "--except I feel the Heat-Timer unit saves more- and there Were not as many high/lows in the building." He also rikes the fact that he can call up the system by modem without any additional software.

Although Mr. Gendels was not intimidated by the sophisticated control system, not all of Marlande Heating Corporation's customers are so at ease with computerized controls. Even so, Mr. Michitsch has had little trouble teaching his customers how to use the control system. A single demonstration is usually enough to convince a potential user that the system is simple to operate.

"I don't have much experience with computers," says Michitsch, "but I picked it up pretty easily." He found that Heat-Timer was more than willing to help when he was first getting used to the system. Today; he routinely calls up several systems each morning, just for a quick check. It takes about 10 or 15 minutes to check 10 different systems. Mr. Michitsch will typically monitor installations for the first 90 days. By that time, he says his customers are comfortable monitoring and adjusting the systems all on their own.

Typical computer views of Heat- Timer's user friendly communication package.