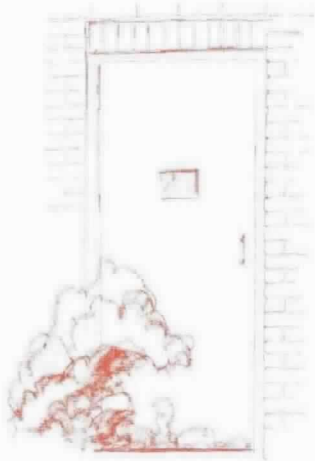


## Five Die in Danbury, Connecticut, Federal Correctional Institution Fire



**The Federal Correctional Institution (FCI)** at Danbury, Connecticut, was a medium-security facility intended to house persons serving sentences of three to five years. It was operated by the Federal Bureau of Prisons, which is a branch of the US Department of Justice. The Bureau of Prisons has 47 correctional facilities under its jurisdiction ranging from maximum-security penitentiaries to

minimum-security halfway houses. In the early-morning hours of July 7, 1977, five inmates lost their lives as a result of a fire in inmate housing unit G of FCI-Danbury. This was the first multiple-death fire in the history of the Federal prison system.

### Background

The Federal Correctional Institution at Danbury opened in August 1940.<sup>1</sup> It was built of fire-resistive construction, the primary construction material being reinforced concrete. The facility contained an administration building, 14 inmate housing units (varying from single-

This report is based on an investigation conducted by the NFPA Fire Investigations Department. The assistance of the Federal Bureau of Prisons, especially Norman Carlson, Director, and Fire Marshal Fred Tomaino of the Danbury Fire Department is appreciated.

<sup>1</sup> Federal Bureau of Prisons, *Board of Inquiry Report, Danbury Fire of July 7, 1977*. (Philadelphia: Bureau of Prisons — Northeast Region, 1977), p. 3.

room type to dormitory type to cell-block type), an auditorium, a dining area, an education building, and various storage and prison industries buildings. The Institution was surrounded on three sides by a 12-foot-high chain-link fence, with the administration building forming the fourth side of the security perimeter.

Inmate housing unit G, where the fire occurred, was located on the top floor of the two-story east side of the complex. It housed 80 inmates in open dormitory-style living quarters that were approximately 40 feet by 84 feet. At the north end of G unit were located a shower room, a washroom, staff and other offices, and the television room.

The primary means of egress from G unit was at the north end of the dormitory, into a corridor and down a stairwell to ground level. A secondary horizontal exit opened into the next inmate housing unit to the south. There was a third way out of G unit. This was part of an old catwalk arrangement; however, the door leading into the narrow stairwell was blocked for security reasons. Also, there was no floor at the base of the catwalk because of excavation being done to replace steam pipes.

Interior finish in the open dormitory area of G unit consisted of an exposed, reinforced-concrete roof slab, exposed concrete walls, and commercial-type carpeting on the floor. Interior finish in the office areas consisted of both combustible and noncombustible suspended acoustical-tile ceilings, ¼-inch plywood paneling on wood-stud wall finishes, and commercial-type carpeting

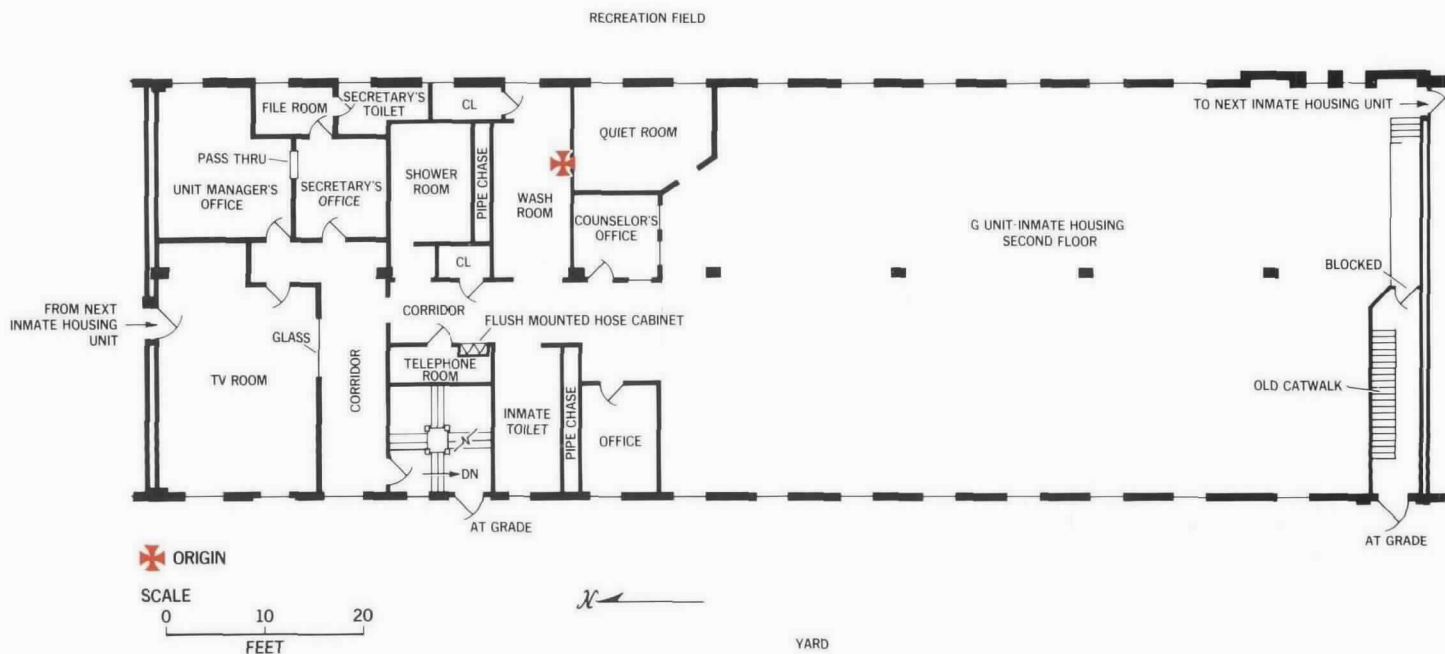
on the floor. There was ¼-inch fiberglass-reinforced plastic paneling on the walls and ceiling of the washroom, toilet, and shower areas. The resin used in the fiberglass-reinforced paneling was a polyester styrene. The ceiling system consisted of fiberglass-reinforced plastic panels applied to both ½-inch plywood and combustible particleboard with an adhesive. The plywood and particleboard were nailed to a two-by-four wooden member suspended ceiling system.

The fiberglass-reinforced plastic paneling, according to information presented in the manufacturer's technical literature, had a flame spread rating of 15 and a smoke developed rating of "over 500," when evaluated in accordance with NFPA 255-1972, *Method of Test of Surface Burning Characteristics of Building Materials*.

There were no fire alarm systems in any of the inmate housing areas of FCI-Danbury. Emergency communications for both fire and security were conducted by way of the telephone system. If the numbers 222 (or the "deuces," as they were called) were dialed, special emergency telephones rang in strategic locations throughout the institution.

Inmate housing units at FCI-Danbury were equipped with pressurized water, portable fire extinguishers, and 50 feet of 1½-inch occupant-use standpipe hose. The steel standpipe hose cabinets were kept locked to prevent inmate access to the equipment; this was done so that the hose and nozzle could not be used by prisoners as weapons or in escape attempts. All of the correc-

Figure 1.



tional officers had keys to the standpipes. The hose-cabinet keys were identified by a "raised rivet," so that the keys could be located and used in the dark.

The institution maintained a 1973, 750-gpm fire truck with a 500-gallon booster tank, 850 feet of 2½-inch hose, 350 feet of 1½-inch hose, and other fire-fighting equipment such as ladders and breathing apparatus. The truck was manned by an inmate fire brigade.

A simple, but effective method of security was being used at FCI-Danbury. Correctional officers inside the inmate housing units were locked in along with inmates. The dormitory officers could go from unit to unit, but did not have keys to the outside doors. The yard officer had the keys to the outside doors of inmate housing, but did not possess keys to the outside gates. If the yard officer had to go into an inmate housing unit, he would leave his yard keys outside. This method of security made it impossible even for someone with a set of keys to get from the inmate housing units all the way to the exterior of the institution.

At the time of the fire, 80 inmates were present in inmate housing unit G, with a total prison population of 839. The institution was designed to house 499 inmates.<sup>2</sup> The normal complement of correctional officers on the night shift was nine; however, at the time of the fire, there were 10 correctional officers on duty. This included an emergency medical attendant.

#### The Fire

Just after midnight on Wednesday, July 7, 1977, an inmate count was completed and all 839 inmates of the institution were accounted for. Following the inmate

count, the dormitory officer proceeded through G unit from north to south, passing by the washroom, through the dormitory area, and leaving through the metal door in the southeast corner of G unit into the next inmate unit. This was just prior to 1:00 am, and he noticed nothing out of the ordinary.

At approximately 1:15 am, the control room officer received a call on the emergency phone from an inmate, stating that a fire was in progress in G unit. The yard officer, dorm officers, and correctional supervisors were notified and responded to G unit. The yard officer opened G unit; the correctional supervisor, as was required by security regulations, handed his keys to the yard officer and proceeded into G unit. Arriving in G unit, the correctional supervisor found inmates operating pressurized water extinguishers on a fire in clothing hanging on the wall in the washroom area. One inmate reportedly inverted a pressurized extinguisher to operate it, since he was familiar with soda acid-type extinguishers, but only compressed air was discharged.

Heavy black smoke began to be generated by the fire as the plastic paneling on the walls and ceiling of the washroom became involved. The correctional supervisor could not use the standpipe hose because the cabinet was locked and his keys were outside with the yard officer. When the ceiling system began to collapse, it became evident that the fire could not be easily extinguished and that exiting past the washroom area was becoming impossible. The correctional supervisor left the area with six or seven inmates and went back down the stairway to the exterior. The yard officer locked the door after these inmates and the correctional supervisor had exited.

The correctional supervisor proceeded to the control room to report the seriousness of the fire, and instructed

<sup>2</sup> *Ibid.*



Interior view of Inmate Housing Unit G at FCI-Danbury.

JOHN MONGILLO, JR.  
*New Haven Register*

Washroom of G Unit at the Federal Correctional Institution in Danbury, Connecticut. Area of fire origin is at the left.

JOHN MONGILLO, JR.  
*New Haven Register*



the control room officer to call the Danbury Fire Department. The time was 1:30 am. The correctional supervisor then went to the metal door in the southeast corner of G unit that led into the adjacent inmate housing area to the south. He was joined by a dormitory officer, and they attempted to unlock the metal door. Because of the pressure against the door from inmates trying to leave the fire area, the key broke off in the lock cylinder. At this time, inmates in G unit were screaming and breaking windows, and dense black smoke was pouring out of the unit.

After the two primary means of egress from G unit became unusable, one due to the fire and the other due to a broken key in the lock, correctional officers and inmates went up an old catwalk stairwell (see Figure 1) to remove plywood and two-by-four braces that held the wooden door at the top of the stairwell closed.

As the first inmates were being evacuated from G unit through the wooden door and old catwalk, Danbury Fire Department apparatus and fire fighters were arriving. The first apparatus was sent to the east side of G unit onto the recreation field. Because of the rescue operations that were necessary and the heavy volume of smoke showing, the fire officer in charge called for a second alarm at 1:38 am. Second-alarm fire companies arrived four to five minutes later; they entered the institution through four consecutive security gates and went into the yard on the west side of G unit. There is no indication of any excessive delay in fire apparatus entering the recreation field or the yard.

Initial fire department activities included the evacua-

tion of G unit by fire fighters with breathing apparatus, assisted by inmates and correctional officers, and fire suppression activities with 1½-inch hoselines. Due to the reinforced-concrete roof slab, vertical ventilation was impossible, and only limited ventilation was possible through the security-type windows of the dormitory area. The fire was under control at approximately 2:00 am, with the last inmates being evacuated at about the same time. After the evacuation began, the metal door leading from G unit to the adjacent housing unit to the south was opened by correctional staff, inmates, and fire fighters using forcible entry tools.

The fire began in clothing hanging on wooden pegs on the southern wall of the washroom. It was determined to be of human cause, but whether the fire was accidental or incendiary is still being reviewed by the Connecticut State Fire Marshal's office, the Federal Bureau of Prisons, and the Federal Bureau of Investigation. The fire spread to the adjacent corridor and counselor's office, consuming fiberglass-reinforced plastic wall paneling, plywood, high-density compressed particleboard, and thin plywood paneling. There was no fire extension into the dormitory area and no structural damage.

As a result of the fire, five inmates from G unit died. The cause of death was listed as asphyxiation due to smoke inhalation.<sup>3</sup> Sixty-eight other inmates were injured, along with two staff members, three fire fighters, and one member of a rescue squad. The injured were

<sup>3</sup> *Ibid.*, Exhibit C — Certificates of Death.

treated at the Institution's infirmary and at the Danbury Hospital. Two of the seriously injured inmates were evacuated by air to the Medical Center for Federal Prisoners at Springfield, Missouri.

#### Discussion

Many failures of the firesafety system occurred during this fire.<sup>4</sup> The most significant factors leading to the loss of life in this fire were the presence of fuels that promoted rapid flame and smoke development, the failure to evacuate occupants quickly and reliably, and the fire not being extinguished in an incipient stage before it became life-threatening.

An automatic sprinkler system would have been the most reliable fire defense for G unit of FCI-Danbury. However, even without automatic detection and suppression equipment, the firesafety system, with little or no expenditure of money, could have been more effective by revisions to emergency procedures in the fire plan.

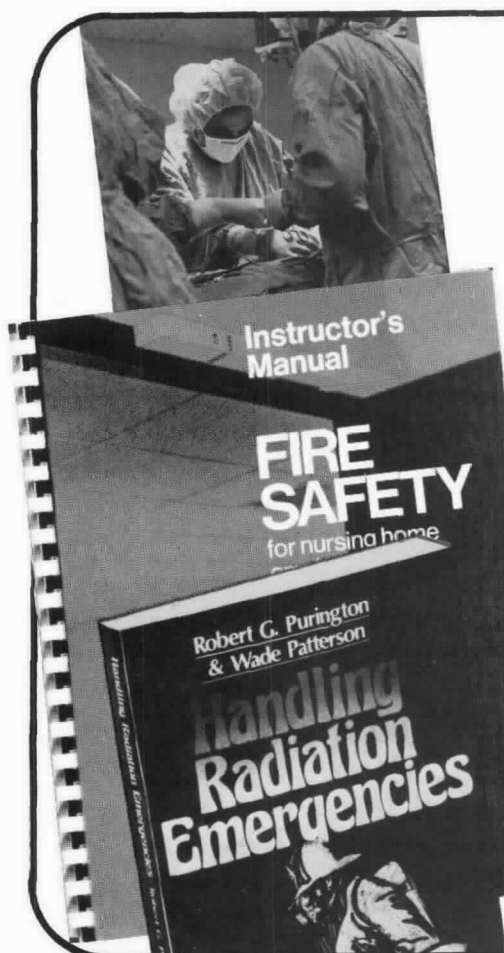
The fire plan for FCI-Danbury relied on manual fire detection and manual fire suppression. During the fatal fire incident, manual fire detection was not delayed;

however, the inmates of the fire brigade were never released from their housing units, nor was the institution's fire apparatus ever utilized. The Danbury Fire Department became the primary manual fire suppression force, yet they were not called for until about 15 minutes after the first discovery of the fire. This was partly due to the fire plan. The plan called for notifying up to 11 people or departments of a fire incident within the Institution before calling the Danbury Fire Department, and then only "if deemed necessary by the employee in charge at the scene, the warden, associate warden, duty officer, or correctional supervisor."<sup>5</sup> The fire department should be called immediately in the event of a fire. They can always be returned if they are not needed. If they are needed, rescue and fire suppression activities will almost always be more successful if started early in the fire growth and development.

Since this fire, the staff of FCI-Danbury and the Danbury Fire Department have reviewed and updated the Institution's fire emergency plan. In addition, a comprehensive program of practicing fuel control, providing additional fire detection and suppression equipment, and conducting training and planning sessions has been established at FCI-Danbury, as well as throughout the rest of the Federal Prison System.  $\triangle$

<sup>4</sup> Gordon P. McKinnon, ed., *Fire Protection Handbook*, 14th Edition. (Boston: NFPA, 1976), Section 6, Chapter 2.

<sup>5</sup> Board of Inquiry Report, Exhibit I — FCI Danbury Fire Plan.



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