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VOL. 51, NO. 4

DECADE BY DECADE...

2 50 YEARS OF WNYF

We explain the magazine's origins and
thank this issue's volunteers.

4 THE 1940s

World War II dominated the decade.
For the Department, water towers,
hydraulics, and church fires made
headlines.

10 THE 1950s

The war turned cold while heat turned to
oil and Halligan invented the halligan.

16 THE 1960s

The FDNY's "war years" began, and the
23rd Street collapse stunned the
Department when it claimed 12
members' lives.

22 THE 1970s

Local Law 5, PVC, power saws, and the
Hurst tool entered the FDNY vocabulary.

28 THE 1980s

Haz Mat 1 joined the rolls; Rescue 1 lost
its quarters in a fire-related collapse.

32 A GUIDED TOUR OF WNYF'S NEW DESIGN

Gloria Sturzenacker

The new look you see in this issue is
meant to make information easier to find
and absorb.

WNYF: A NAME...

Articles by Gloria Sturzenacker

34 FROM READER TO CONTRIBUTOR

You can contribute articles, photos, and
artwork. Just follow these guidelines.

35 IF YOU'RE THINKING, "BUT I CAN'T WRITE"

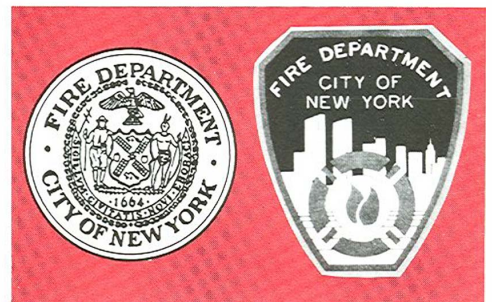
Five basic steps to getting your ideas
down on paper revolve around the
mental preparation involved.

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36 MAGAZINE PRODUCTION: HOW EDITED ARTICLES BECOME A PRINTED PRODUCT

It's a multistep process that has a long
lead time.

...To Live Up To



PAGE 27

...THROUGH WNYF

40 BIG PLANS FOR A BETTER WNYF

Attention, subscribers! There's a price
increase for 1991, but you'll get your
money's worth: added pages, new
sections, and more color photos.

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City government honors WNYF's 50th.

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4TH DIVISION
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James J. Nugent

5TH DIVISION
John C. Pickhardt
Henry Huncharoff

5TH DIVISION
Art H. Meyerson
Dennis J. Kelly

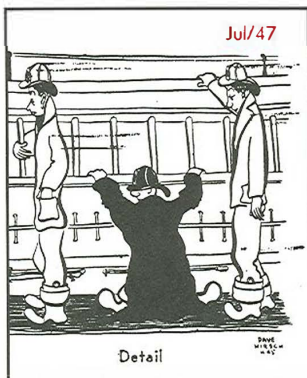
fires. Despite the "lumberyard" construction of the fair, fire losses to the \$155 million investment were kept to a very nominal sum. —Groneman

FIRES—RETROSPECTIVE

"Equitable Fire of 1912," Author not named, Jan/42, p.14

Many terrible events early this century combined to force city planners and building designers to examine the fire potential. The Equitable Building fire was a catastrophe which electrified the New York of another era and resulted in the loss of six lives. It led to revolutionary reforms in standpipe, sprinkler, and general building code laws. Five alarms and a borough call brought a total of 31 engines and 10 ladders to fight the fire. —Miale

had felled fire personnel. The author's years of study and research led to the creation of a mobile research lab. The unit would respond to greater alarms and special calls. Its function was to analyze gases, chemicals, or products of combustion to determine the potential dangers they posed as well as take samples for fire marshals. —Cantley



Above (Apr/42) The U.S.S. *Lafayette* (formerly the French luxury liner *Normandie*) burned February 9, 1942, while the ship was berthed on the North (Hudson) River. (Daily News) **Left (Oct/46)** Heavier security in businesses has made this method of springing doors mostly obsolete.

set by burglars—because a complete set of burglar's tools was found! —Maloney

BLDG. CONSTRUCTION
FIRES—CONTEMPORARY

"Standpipe Job," Gerhardt E. Bryant (D.C., Div. 3), Oct/43, p.4

So, "Holy" Joe Gullah hits upon a great disguise, in the days when priests walked in their parishes: a Roman collar. With his tools and ill-gotten proceeds in his little satchel, Joe passes on the outskirts of a multiple-alarm fire. Suddenly he's grabbed by a big cop and literally dragged through the fire lines and into the partially collapsed building to give the last rites to a doomed firefighter trapped under the debris. The raging fire causes more of the building to collapse, and everyone runs. But wait! Two bodies are found! Did Joe go back to the victim who was calling for absolution? The newspapers report a heroic priest died with the firefighter and the fire apparently was

A June 1943 fire opposite Grand Central Terminal demonstrates that *fireproof* is a misnomer. It's true that the building itself won't actually burn, and fire may be prevented from spreading from floor to floor. But with the heavy fire load found in an office building, the heat and smoke given off when the contents are fully involved are devastating. Efficient ventilation is essential to extinguishing the fire in a reasonable amount of time. —Vitale

COMMUNICATIONS

"The 'Walkie-Talkie,'" Art H. Myerson (Fr., E.31), Oct/43, p.8

Fireground communication between chief officers and the firefighting units had always been

HAZ MAT

"Laboratory on Wheels," Milton Brodey (Fr., Res.1), Oct/42, p.8

Numerous incidents, some tragic, had occurred in which fumes or products of combustion

SHORT STORIES

"Trial By Fire," Joseph Harrington (ID not given), Jan/43, p.14

The plight of a burglar was not a happy one in these years. The cops would pounce on him if his pockets bulged or he was carrying a suitcase (search and seizure has changed somewhat since then!).

15TH DIVISION
Arnold A. WeintraubMARINE DIVISION
Joseph Power
Calvin ClementsMARINE DIVISION
Harold Johnston
William A. SandinMARINE DIVISION
Wilfred J. Foley
Paul Maggio

FDNY HISTORY

"Smoke Eater's Lingo," Leo Blond (Fr., L.22) and Harold J. Jonas (Aux., Div.4), Oct/44, p.36

If today's firefighter were to talk to a counterpart of 50 years ago, there'd be some trouble communicating. Close to half the jargon defined here has passed out of use. No longer heard are terms such as *syringe* (for the water tower) and *deuces are in* (the distribution of paychecks, signaled on the bells by "2-2-2-2").
Dawe and Sturzenacker

APPARATUS

"The Water Tower," Charles E. Kuehhas (Capt., L.24), Oct/44, p.38

This fine article describes the history and operation of the "towers," of which the FDNY

never had more than six in first-line operation at any one time. This was written four years before the first FDNY metal aerial and 20 years before the first tower ladder. The water tower, 65 feet high when fully extended, was the primary method of getting a lot of water onto fires in upper floors of mainly commercial-type buildings. At that time, only two of the FDNY ladder companies equipped with wooden aerials even carried a ladder pipe.
—Lerch

TECHNICAL

"The Peril of Plastics," Gustave E. Bonadio (Fr., E.259), Jul/45, p.12

As the 1940s passed, so did the war, and industry returned to the production of consumer goods. The plastics industry started its rise to prominence,



With the addition of flow meters to pumpers, pump operators simply raise or lower pump pressure to satisfy their immediate needs without making all the calculations.—*Cantley*

STRATEGY AND TACTICS

"Church Fires," Cornelius J. Flynn (Fr., L.11), assisted by Deputy Chiefs Edward Conners and Frank Murphy, Jan/46, p.28

This is one of the first WNYF articles to give in-depth treatment to a single aspect of strategy and tactics. Before this, the magazine had printed mainly human interest stories, statistics, fire stories, and test questions for promotional exams. This article contains an extensive section, in outline form, on how to size up a church fire, and there's a diagram of a typical church showing the rose window. The comments about using the rose window for extinguishment and removing stained glass windows during fire operations don't agree with today's strategy and tactics for church fires. However, the size-up and categories of fire causes for church fires are still important information.—*Dunn*

which would so greatly affect firefighting in the '60s and '70s. Even in 1945, the dangers of burning plastics were catching the attention of firefighters, who had only filter masks and not yet the benefit of SCBA. This article deals with the flammability of plastics, the possibility of flameproofing plas-

Left (Jul/43) Rescue 1 members display, left to right, two hose masks, an MSA self-contained oxygen mask, an all-service mask, and a Draeger SCBA. Capt. Raymond Millner demonstrates the blower which supplies the hose masks.

tics, and, of course, the products of combustion of burning plastics. Many of the characteristics of plastics around in 1945 are the same as those with us today.
—Dawe

TECHNICAL

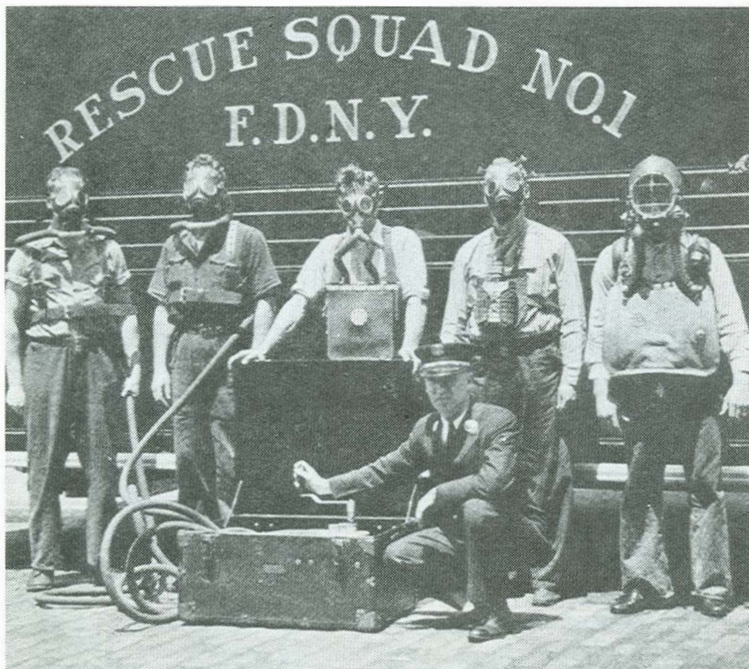
"Hydraulics Illustrated," James F. Carey (Fr., E.267), Oct/45, p.18

The hydraulics of hose streams was a hot subject in the FDNY of the 1940s and 1950s. Formulas to determine nozzle and engine pressures by figuring in friction loss and head pressure were necessary for the pump operator to adequately supply a hose line or large appliance. As time passed, so did the emphasis on hydraulics.

FIRES—RETROSPECTIVE

"Brooklyn Theatre Fire," Samuel M. Ribman (Fr., E.228), Oct/46, p.4

Theater fires accompanied by large losses of life permeated the 19th century. Before the appearance of radio and television, live performances were the mainstay entertainment, satisfying the need of a public which found increasing amounts of leisure time as a result of the industrial revolution. The fire protection standards that must accompany a large assembly of humanity lagged far behind. Even in the "modern" theater of 1876, there were open flame and flammable scenery, overcrowding, inadequate exit passageways, and a lack of emergency lighting. These conditions contributed to the mass panic in this fire disaster.



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RETIRED MEN'S CORNER

Bernard Neer



foreman to captain; suburban companies; leave periods; and apparatus. Some of the Department's most colorful members are mentioned and given their due. In just more than four pages, with some great photos, Meek smoothly carries you from 1865 to 1897, describing all the changes the Department faced in that period.—*Hashagen*

■ **SUPERVISION**

"The Essentials of Management and Supervision," Vincent J. McLaughlin, Ph.D., Jan/58, p.27 of Fire College Bulletin



The human element as it relates to supervision is addressed by highlighting many of the common characteristics and differences of employees which officers must recognize to get the job done. These fall in such areas as intelligence, maturity, sociability, and attitudes.—*Remhild*

■ **FDNY HISTORY**

"Sappers & Miners Corps," Clarence E. Meek (Hon. B.C., Library), Jul/58, p.12

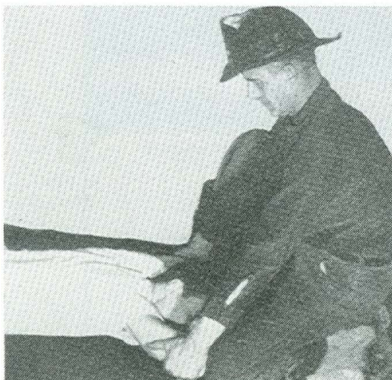


Chicago's Great Fire had driven home the destructive power of a true conflagration. In response, the FDNY in 1873 gained the authority—and established the Sappers and Miners Corps—to demolish entire buildings, creating firebreaks across which such flames could not travel. However, by the late 1950s, the corps' expertise in explosives had apparently been used only for more routine demolition, and the corps was disbanded.—*Hashagen and Sturzenacker*

■ **ODD JOBS**

■ **HAZ MAT**

"Odd Job," Philip Oklan (D.C., Div.1), Jan/59, p.6



This smoky, toxic fire in September 1958 started with a can of white phosphorus being

knocked over and bursting into flame. The ancient loft building on Manhattan's Canal Street housed a chemical company. Bottles of nitric, sulfuric, and hydrochloric acid burst, and the fire intensified when the owner threw water on it. Fog lines, liquid foam, and CO₂ were used, but the fire kept burning. As a last resort, Oklan ordered Rescue 1 to shovel on its graphite powder, normally used against flammable metals. The G-1 worked, and so did the masks firefighters wore—there were no injuries to members.—*Hatton and Sturzenacker*

■ **FDNY HISTORY**

"Engine 30 Takes Up," Clarence E. Meek (Hon. B.C., Library), Jul/59, p.18

Engine 30 overcame inglorious origins in the paid Department—inheriting a hand-drawn hand pumper in 1863—to earn the distinction of becoming the only triple-section company in the history of the "job." Fire safety improvements after some of New York's great fire disasters changed the hazards so drastically that Engine 30 was disbanded on April 1, 1959.—*Hashagen*



Left (Apr/52) This was resuscitation before external cardiac massage joined with mouth-to-mouth to make CPR. The Nielsen Method added an arm lift to the Schaefer Method's back press.

Above (Apr/51) Handlines, turret pipes, and a water tower play on the burning Church of Sacred Hearts of Jesus and Mary and St. Stephen. It was a January 1951 fifth alarm in Brooklyn. (Ed Heavey)

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□□□

worked its way between the tankers, which were still wedged together; with the help of other fireboats and tugboats, the *Smith* was able to rescue the remaining crew members and bring the fire under control. In all, 33 crew members were killed, but FDNY fireboats averted even further disaster by preventing extension to any of the shoreside petrochemical complexes that crowd this busy waterway. Yet later that month, four more people would die in an explosion as engineers tried to salvage some of *Alva Cape's* cargo. —Trojanowicz

HAZ MAT

"Cryogenics—Liquefied Natural Gas," William F. Seifried, (D.A.C., later A.C., Ofc. of Fire Comm.), 4th/68, p.16 and 1st/69, p.13

Cryogenics, which liquefies gases by subjecting them to extremely low temperatures, was relatively new to the fire service at the time. The primary hazard would be thermal exposure of surroundings. LNG (liquefied natural gas), for example, requires a temperature below -258 degrees Fahrenheit. The articles describe

**SAFETY****TOOLS AND EQUIPMENT**

"Your Eyeshields," Safety Div., 3rd/67, p.19

This is a brief article about the only device the FDNY has adopted to protect the firefighter's eyes. These eyeshields were the brainchild of a firefighter from Engine 231 in Brownsville. Fr. Lester Bourke saw a need and came up with this unique method of eye protection. —Vigiano

two LNG plants which were being constructed, one in the Greenpoint section of Brooklyn and the other in the Gulfport section of Staten Island. —Cantley

FIRES—CONTEMPORARY STRATEGY AND TACTICS

"A Manhole Fire," William J. Morrissey (B.C., Bn.40), 2nd/69, p.10

Most of the times that we're asked to check the cellars of adjoining buildings for fire extension from a manhole fire, there is

no extension. But this article tells us what might happen if it does: Disaster! A manhole fire such as this December 1968 one in Bay Ridge is an unusual and difficult fire that doesn't happen often. However, every officer is going to experience it at least once; this article can help the officer be more effective in the control and extinguishment of that fire when it happens. —Dunn

COMMUNICATIONS

"Voice Alarm," by Patsy P. Maggio (Ch. Disp., Richmond), 3rd/69, p.22

Before development of the voice alarm, firefighters had been turned out by a signal given

first on a primary system of bells, then on a secondary system. The only two-way communication was by telephone. The "voice alarm" is a system of firehouse speakers which the central office controls. Everyone in the house hears the message, and they have a handset for two-way communication. The voice alarm did away with the secondary bell system, and the primary bells remained only as backup. In more recent years, the voice alarm system itself has become backup to computer-aided dispatch. —Cantley

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Distinio Lois, Jr.

TECHNICAL SERVICES

Joseph Ganzekauer

RETIRED MEN'S CORNER

Frank Cull



sary for a BLEVE to take place are discussed in detail, as are the factors members should consider when faced with a possible BLEVE. —*Dave*

■ **BLDG. CONSTRUCTION STRATEGY AND TACTICS**

"Parapet Walls... And Their Collapse," Vincent Dunn (D.C., Div. 7), 4th/78, p.12

New York City has a long and deadly experience with these. A parapet is the most

hit close to home when an explosion occurred July 12, 1978, at a Queens apartment which was being used as a pipe bomb factory. Outlined along with the operation are the FDNY's basic procedures when encountering explosive or suspected explosive devices. —*Groneman*

■ **ANSWERS: THE '70s**

Questions appear on p.25

1. The Department's reflex time was at least 20 minutes. A member's effective work time was



Above (1st/76) The FDNY's new insignia looks significantly more modern than its predecessor. The winner of an in-house design contest was Fr. Athos "Chris" Yonick. **Left (3rd/73)** The beard wouldn't be found on a firefighter in the field today, but the activity is the same. A member uses a resuscitator on a child overcome by smoke. The fire was on East 140th Street in the Bronx, in August 1973. (News)



steamer *General Slocum* caught fire as it proceeded through the East River's treacherous Hell Gate. Unable to stop in "the Gate," *Slocum's* master proceeded through and beached the vessel on the shore of isolated North Brother Island. Fireboats responded, some with land companies aboard, but the *Slocum* was quickly consumed and there was not much work for the Department other than to remove and count more than 1,000 victims. —*Trojanowicz*

between the bumper and the taxi. Rescue I extricated the horse using the Hurst Tool to spread the bumper and wooden chocks to prevent it from springing back. —*Hlatton*

unstable portion of an exterior masonry wall. The article demonstrates that fire can distort steel I-beams so they force a side wall to bulge outward, by expansion, or dump a parapet wall that they support. This fact has changed the definition of a collapse zone to include the whole width of the building. More important, the article defines specific responsibilities for firefighter safety that each level of command has during a fire and collapse. —*Vitale*

■ **CURRENT EVENTS FIRES—CONTEMPORARY**

"Bomb Factory," Joseph F. Daly and William J. Earl (both B.C., Bn.46), 1st/79, p.12

During the late 1970s, terrorist groups became more brazen and belligerent. Their activities

- approximately 5 minutes. (1st/73)
- 2. Control. (3rd/74)
- 3. What is expected to get done. (2nd/76)
- 4. Their behavior can never be fully predicted. In this case, as in many high-rise building and private dwelling fires, the victims tried to hide in a bathroom. (3rd/76)

■ **FIRES—RETROSPECTIVE**

"General Slocum Afire! Hundreds Perish!," Frank Cull (Lt., Press Ofc.), 2nd/79, p.8

One of the most horrible civilian disasters in the nation's history occurred on the morning of June 15, 1904. The excursion

■ **STRATEGY AND TACTICS**

"Fires in 'H' Shaped Apartment Buildings," Vincent Dunn (D.C., Div.7), 3rd/79, p.10

Photos, diagrams, and words explain the construction of H-type buildings. The basic fire spread problems created by the cockloft and steel I-beams are shown, along with how to counteract these construction defects by hose stretching, tower ladder placement, and roof venting operations. —*Cantley*

■ **ODD JOBS**

"Five Men on a Horse," John J. O'Rourke (B.C., Bn.9), 3rd/79, p.18

In Manhattan in May of 1979, a horse broke free of its handsome harness and crashed into a taxicab. Its leg got wedged

■ **HAZ MAT**

"Caution! Carbon/Graphite Fibers," Elmer Chapman (D.C., Div.3), 4th/79, p.10

Although carbon/graphite fibers had been produced for nearly a century, the late 1970s saw their increased use in composites of tremendous strength, mainly in the construction of aircraft components and athletic and leisure equipment. The electrically conductive fibers are a major hazard when released at fires. —*Groneman*

12TH DIVISION
George Clark
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12TH DIVISION
Haring & Thomson
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McGoff & Thomson

12TH DIVISION
McGoff & Conwell
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Frank Cull



mandated officers training program. Subjects taught to new lieutenants include educational methodology, arson investigation, leadership and management, hazardous materials, and fire tactics and procedures. —Remhild

■ HAZ MAT

"Hazardous Materials Company No. 1," Raymond M. Brown (D.C., Res. Svcs., Ret'd) and Joseph P. Gallagher (B.C., Res. Svcs.), 4th/86, p.10

WNYF formally introduced "Haz Mat" by describing the company's 7-member team, its 35-member roster, and its training at the National Fire Academy in Emmitsburg, Maryland. Readers were also informed of the unit's computer capabilities, testing equipment, and cellular phone. The article also told us of the three levels of protection—Level A being the trademark, fully encapsulating exposure suit. In the four years since, Haz Mat has responded to more than 5,000 incidents—more than any such team known to exist anywhere. —Culley

■ TRAINING

"New Fire Simulator at FDNY Training Academy," Salvatore Sansone (B.C., Trng.) and Steve Aroneo (Austin Electronics), 2nd/87, p.8

In September 1986, the FDNY became the first municipal fire department to have a fire simulator installed in one of its training buildings. It can produce realistic conditions of fire, heat, and smoke, while being monitored and adjusted from a control room. —Groneman

■ ANSWERS: THE '80s

Questions appear on opposite page.

1 In nearby basements, sewers, subways, and other low spots. (3rd/82)

2. The entire floor is occupied by one apartment; there is no public hall. (1st/84)

3. The colder the weather and the higher the structure, the greater will be the stack effect. (4th/84)

4. A lightweight steel roof decking. (3rd/85)

■ BLDG. CONSTRUCTION ■ STRATEGY AND TACTICS

"31st Street Collapse," Vincent Dunn (D.C., Div.3), 4th/88, p.2

October 1987 brought one of the most dangerous collapse rescue operations ever undertaken by the New York City Fire Department. The five stages of collapse rescue are well defined. Dunn also discusses curtain-fall collapse and some of the voids created. Buried in a pancake collapse for nine hours but surviving in an individual void created by pieces of machinery, victim Robin Fischer became a public hero for her courage and calm. —Vitale

■ STRATEGY AND TACTICS ■ FIRES—CONTEMPORARY

"Fire's Changing Signals," James J. Murtagh (D.C., Div.7), 1st/89, p.2

Murtagh's analysis of a June 1988 fire in the Bronx struck a chord with firefighters in many parts of the city who are seeing the effects of thermal replacement windows. "The unsettling oddness of the fire conditions" included unbelievably dense smoke, and flames showing outside windows where there was no fire inside. These were the result of smoke being contained and condensed. Another significant factor here is that in H-type buildings, a self-venting fire can actually melt roofing materials in a way that closes the cockloft off, leaving it unvented. —Vitale



Above (2nd/88) The exhaustion of a tough job is written on the face of Fr. Gil Sullivan, Rescue 4. (Vic Nicastro) **Below (1st/89)** In many cases, the Rabbit Tool can take the brute force out of forcible entry. The hydraulically operated jaws can force the average, inward-opening door in 20 to 30 seconds.

