Tucson Fire Department

Aerial Platform “Firebird 150” 8705

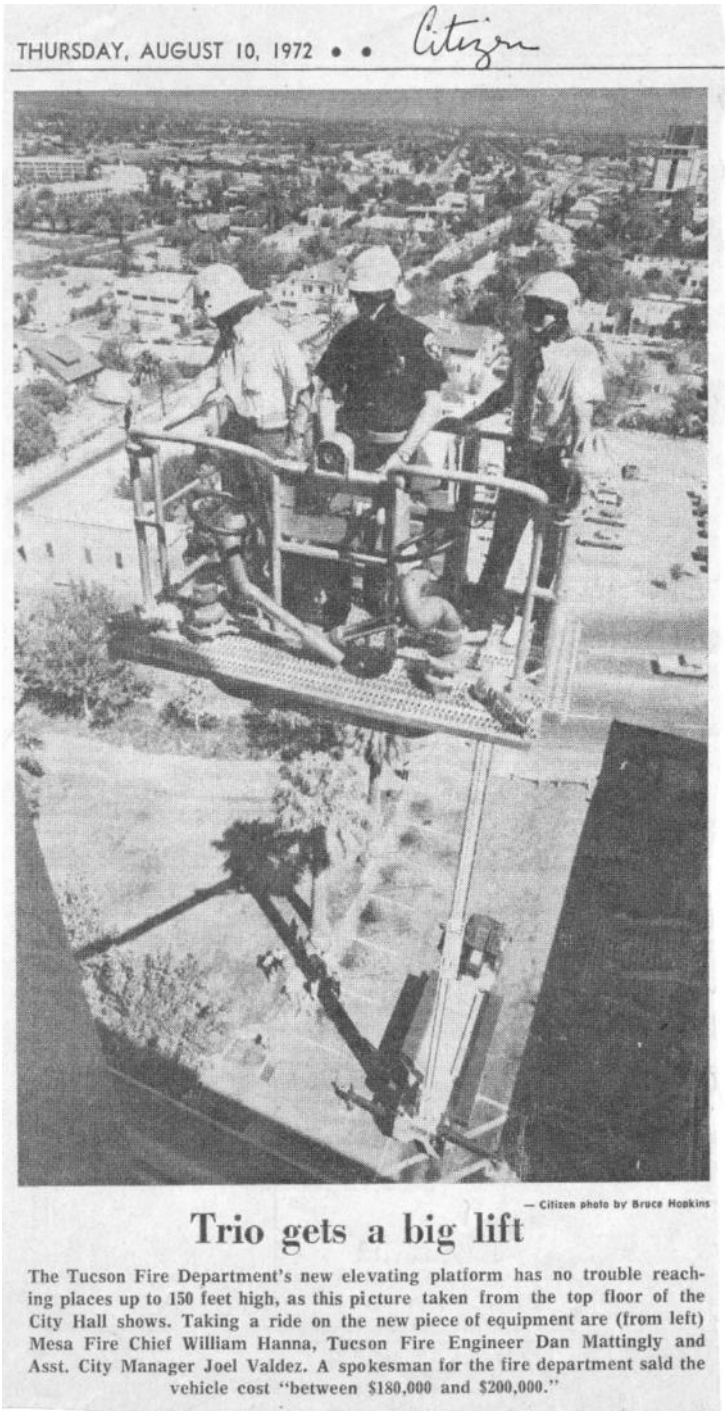
Aerial Platform, 8705

In-service Date	Type	Make	Style/Model	GPM/GAL	Shop#
August 1972	Aerial Platform	Calavar	Firebird	150’ platform	8705

Letter	1st Assignment	Comments
	LD01	City auction 7/1977

Hello Up There!

An Australian who is touring Arizona salutes his Aussie mates 150-feet above on the Fire Department's platform lift during a demonstration of fire fighting equipment. The Rotary International exchange group spent an hour inspecting the department's headquarters. (Star photo by Art Grasberger)



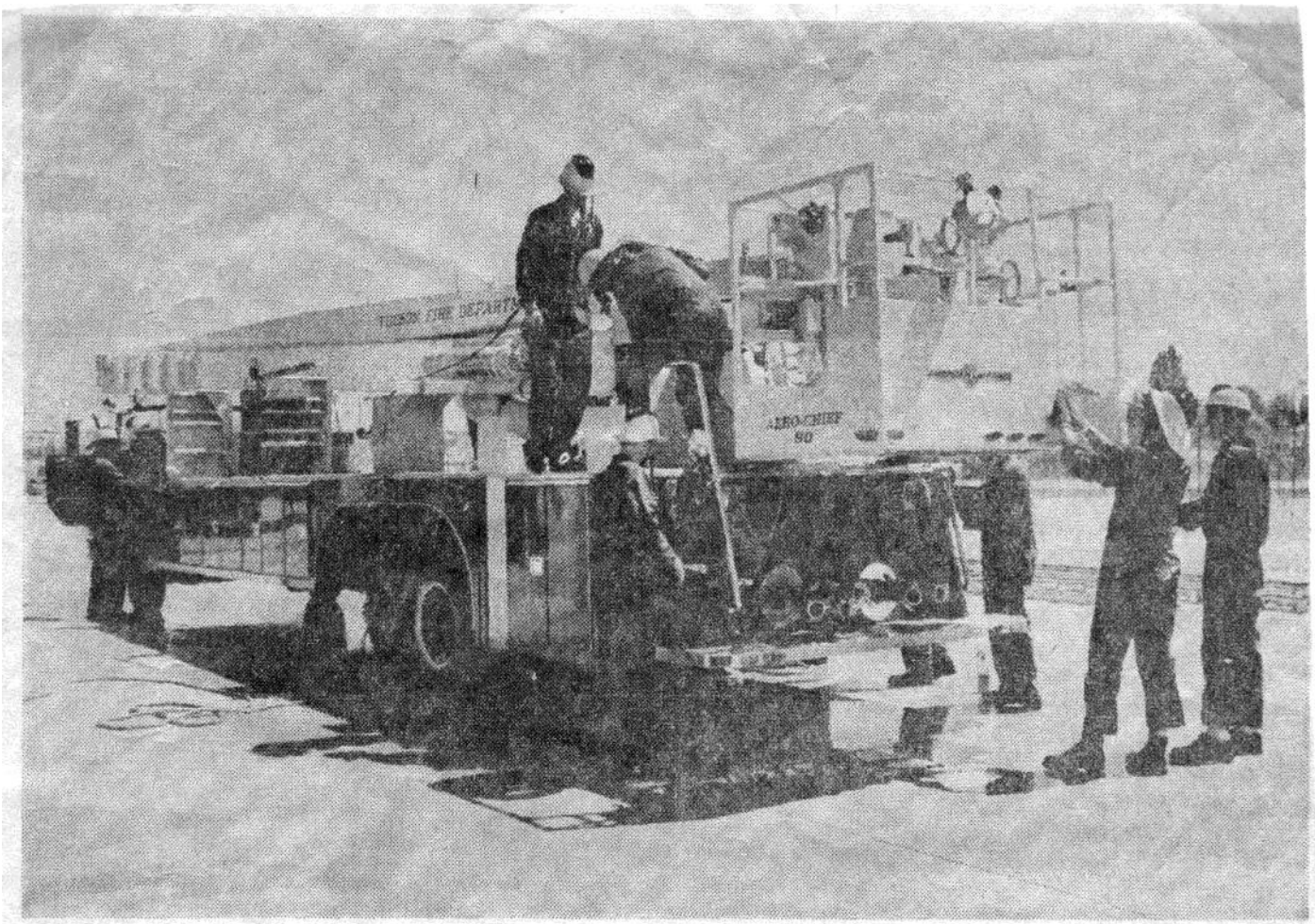
THURSDAY, AUGUST 10, 1972 • • Citizen

— Citizen photo by Bruce Hopkins

Trio gets a big lift

The Tucson Fire Department's new elevating platform has no trouble reaching places up to 150 feet high, as this picture taken from the top floor of the City Hall shows. Taking a ride on the new piece of equipment are (from left) Mesa Fire Chief William Hanna, Tucson Fire Engineer Dan Mattingly and Asst. City Manager Joel Valdez. A spokesman for the fire department said the vehicle cost "between $180,000 and $200,000."

Aerial Platform, 8705



— Citizen Photo by Bill Hopkins

Hot Wheels For Tucson Firemen

The new flagship of Tucson's fire-fighting fleet — a $100,000 Aero-Chief — is prepared for action after its cross-country delivery trip. The massive lift can be elevated as high as eight floors and is capable of carrying 800 pounds. The vehicle pumps 1,000 gallons of water a minute.

Aerial Platform, 8705

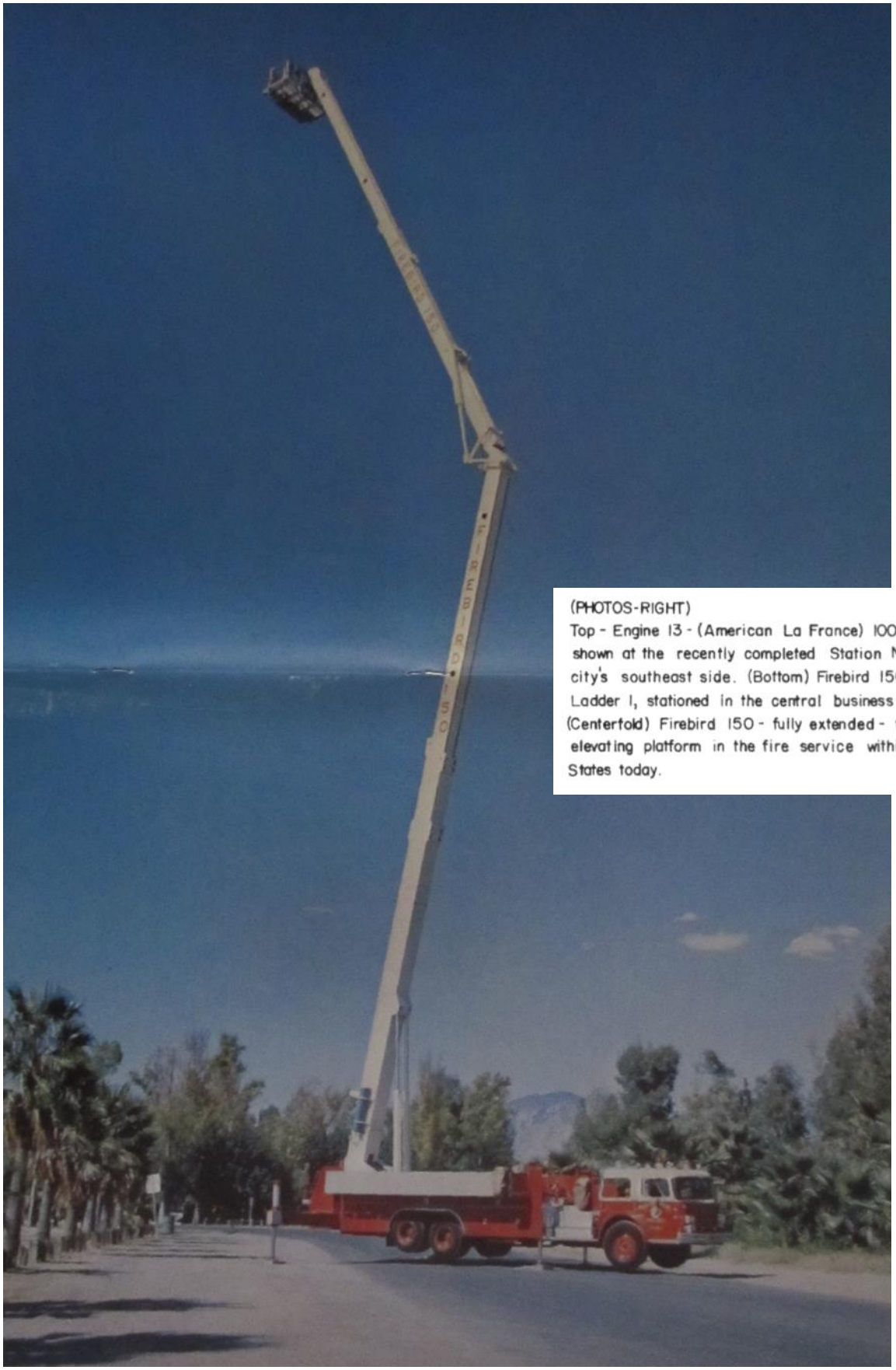
Aerial Platform, 8705

Courtesy TFD Annual Report 1972—1973:

(PHOTO-LEFT)
Ladders 2 (90' American La France); 4 (85' Seagrave); Reserve ladder (85' Seagrave); 3 (100' Seagrave); 5 (100' Seagrave); 1 (150 Calavar).

Aerial Platform, 8705

Courtesy TFD Annual Report 1972—1973:



(PHOTOS-RIGHT)
Top - Engine 13 - (American La France) 1000 gpm pumper shown at the recently completed Station No. 13 on the city's southeast side. (Bottom) Firebird 150 (Calavar Corp.) Ladder 1, stationed in the central business district. (Centerfold) Firebird 150 - fully extended - the only 150' elevating platform in the fire service within the United States today.

Aerial Platform, 8705

November 24, 1978, *Arizona Daily Star*:

Nov. 24, 1978 Az. Star

Fire Department can't find buyer for sophisticated truck

The Tucson Fire Department is having a tough time selling its Firebird 150 platform truck, bought as a result of the 1970 Pioneer Hotel fire that killed 28 persons.

Though the price is right — a bargain $180,000, said fire department spokesman Capt. James B. Grasham — there seems to be no buyer interest in the 6-year-old 150-foot-high platform truck.

Besides the Firebird, fire officials can't find any takers for two 20-year-old ladder trucks. The trucks have been stripped of any usable equipment and are set to be sold as scrap metal, Grasham said.

The trucks are sitting at the city's vehicle fleet service division at 4004 S. Park Ave. They were put there after they failed safety tests earlier in the year, the fire captain said.

If a reasonable bid is not received soon on the two vehicles that were purchased in 1959, they are to be sold at a fire department or city auction.

The Firebird, if not sold soon, will be taken off front-line firefighting duties and put in reserve, said Grasham.

He said officials placed the first sales notice for the Firebird in several fire service publications more than a year ago. Advertisements were placed along with a second invitation for bids earlier this year.

He said the department's lowest acceptable bid would be $180,000, the cost of the truck to the department in 1972 from the California-based Calvar Co.

Grasham said the slow response to the sale offer may be a result of the manufacturer's hesitation to transfer a warranty for the bulky Firebird.

Because of costly and frequent repairs on the sophisticated machinery, the Firebird has become more trouble than it's worth, Grasham said.

Over the last six years the department has added $32,000 worth of equipment to the truck, bringing its value to $325,000.

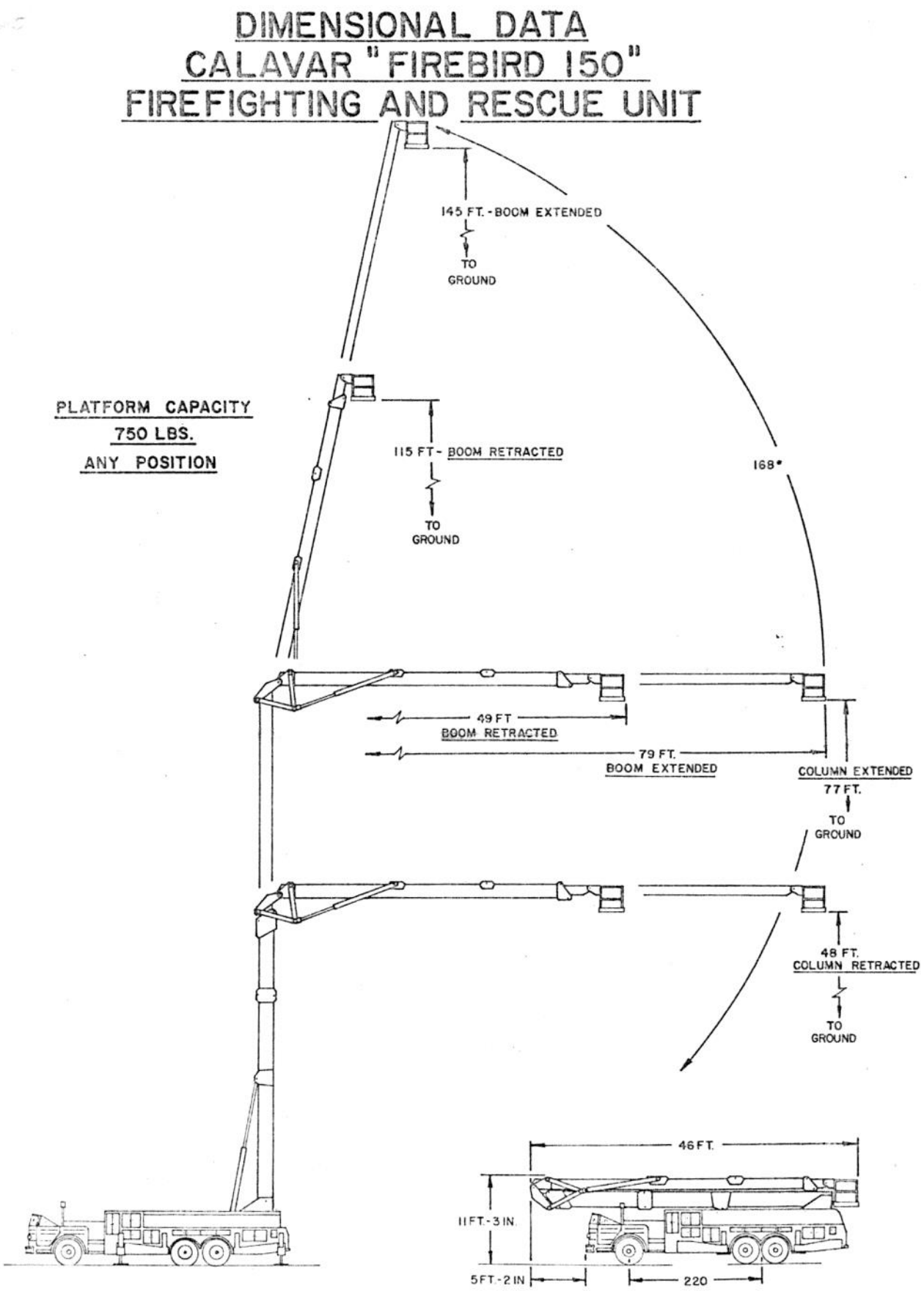
Officials have been eager to sell the Firebird since July 1977, when a new high-rise building fire code took effect.

The code requires tall buildings to have built-in sprinkler systems, fire extinguishers, alarms and evacuation plans — eliminating the need for firefighting equipment to reach the upper floors of some of the city's buildings, Grasham said.

The Firebird had the largest firefighting and rescue platform in the country when it was purchased after the 1970 fire at the Pioneer Hotel. Many of those who died were trapped on upper floors.

Grasham said money made from any fire equipment sale would go to update and to replace department firefighting equipment.

Aerial Platform, 8705



Aerial Platform, 8705

AREA COVERAGE

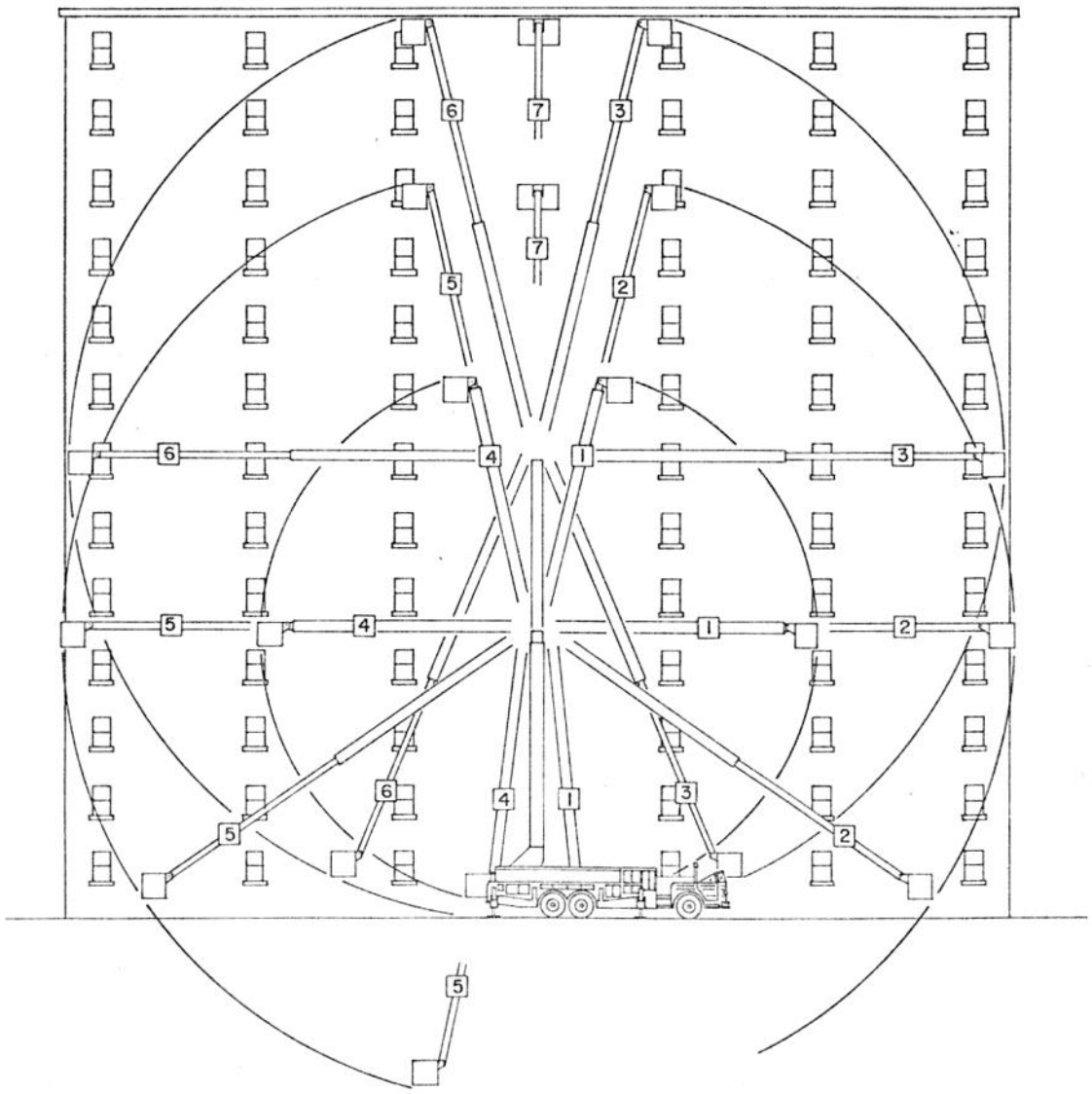
1 ALL BOOM EXTENSIONS FULLY RETRACTED
2 UPPER EXTENSION FULLY EXTENDED
3 ALL BOOM EXTENSIONS FULLY EXTENDED

TURRET ROTATED 180°

4 ALL BOOM EXTENSIONS FULLY RETRACTED
5 UPPER EXTENSION FULLY EXTENDED
6 ALL BOOM EXTENSIONS FULLY EXTENDED

TURRET ROTATED 90° FROM ABOVE

7 ROTATING AND RETRACTING EXTENSIONS



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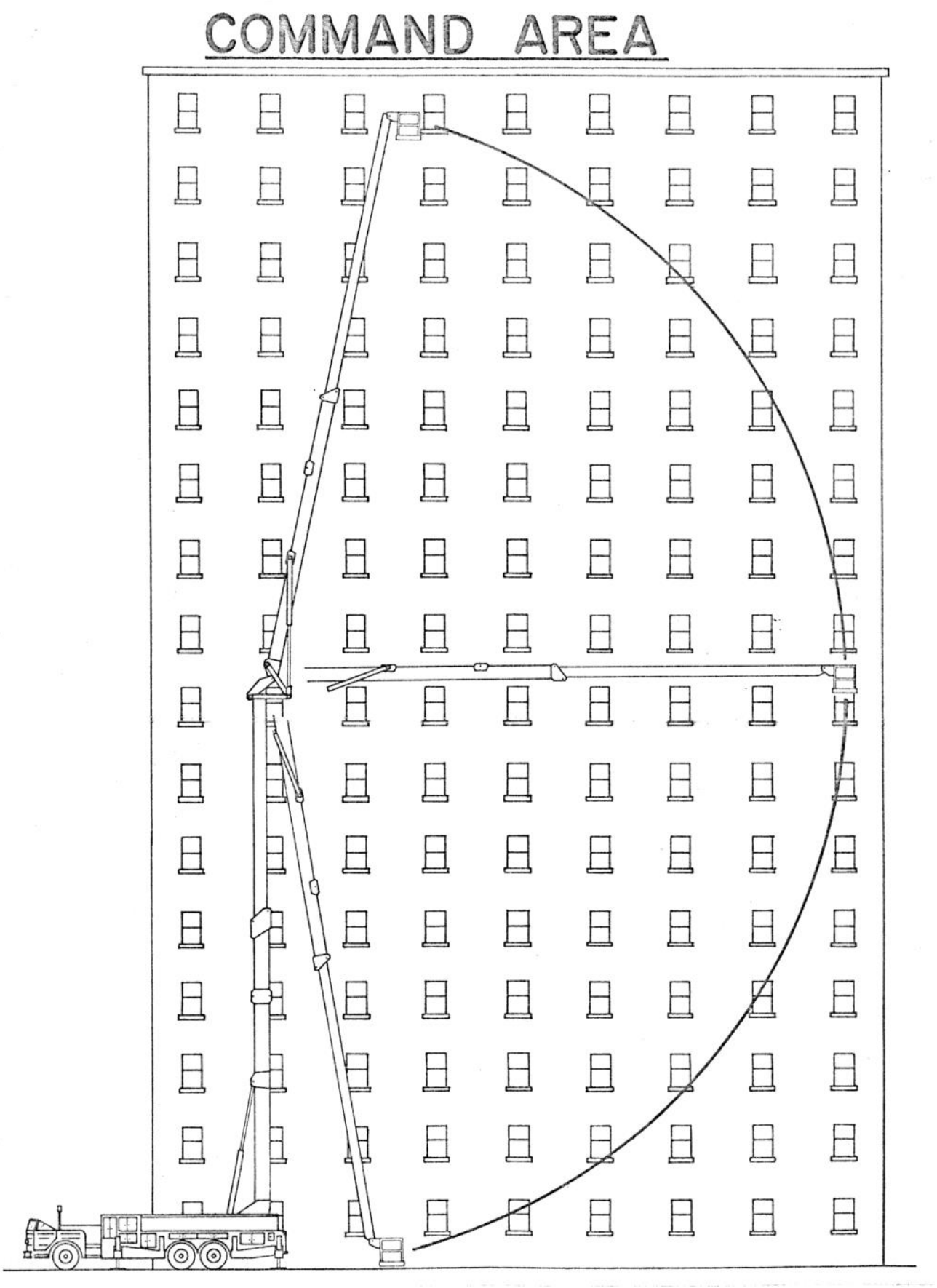
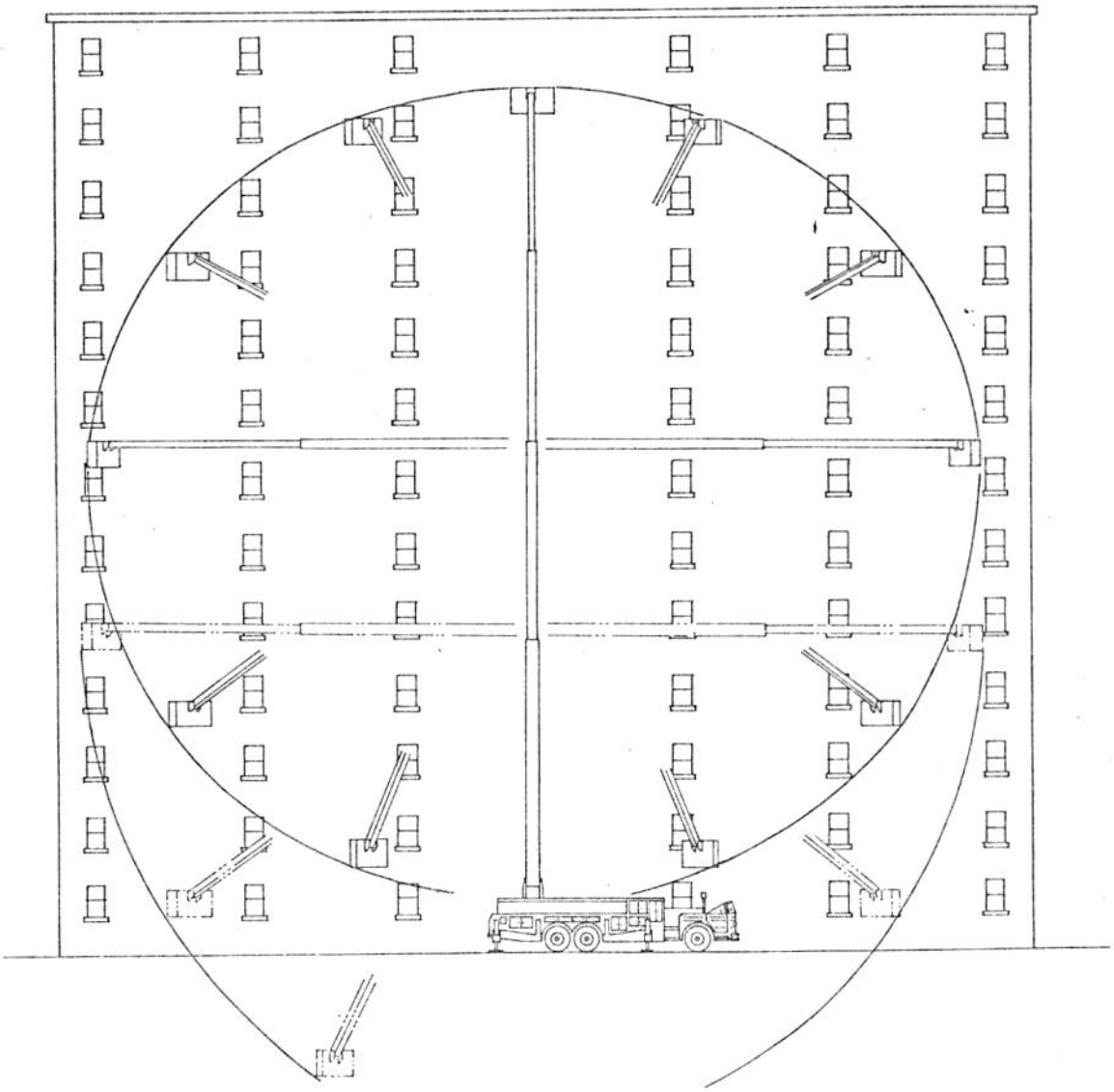


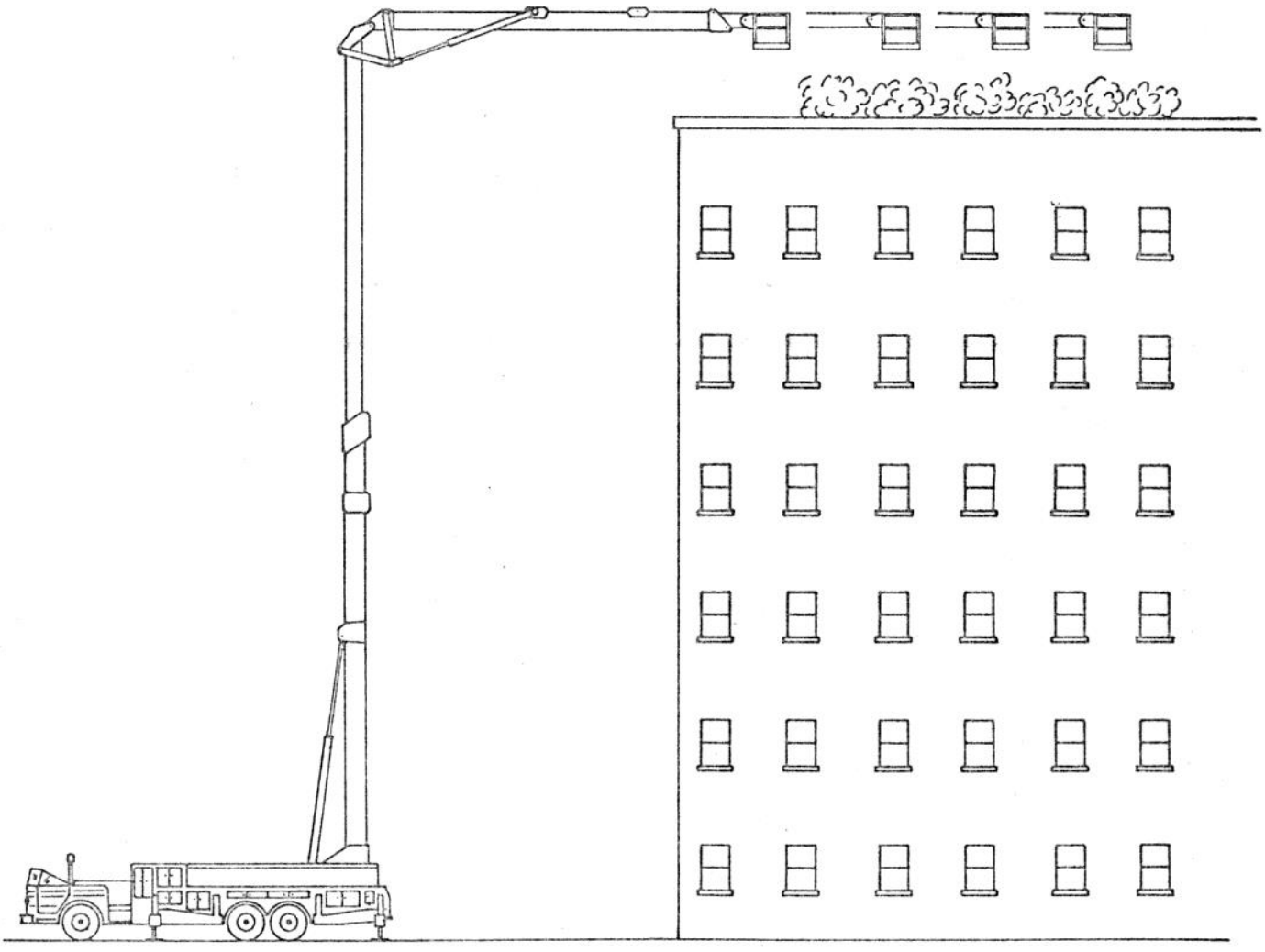
Aerial Platform, 8705

MAXIMUM COVERAGE WITH PLATFORM AGAINST BUILDING IN ALL POSITIONS- CENTER OF TRUCK 15 FT. FROM EDGE OF BUILDING.



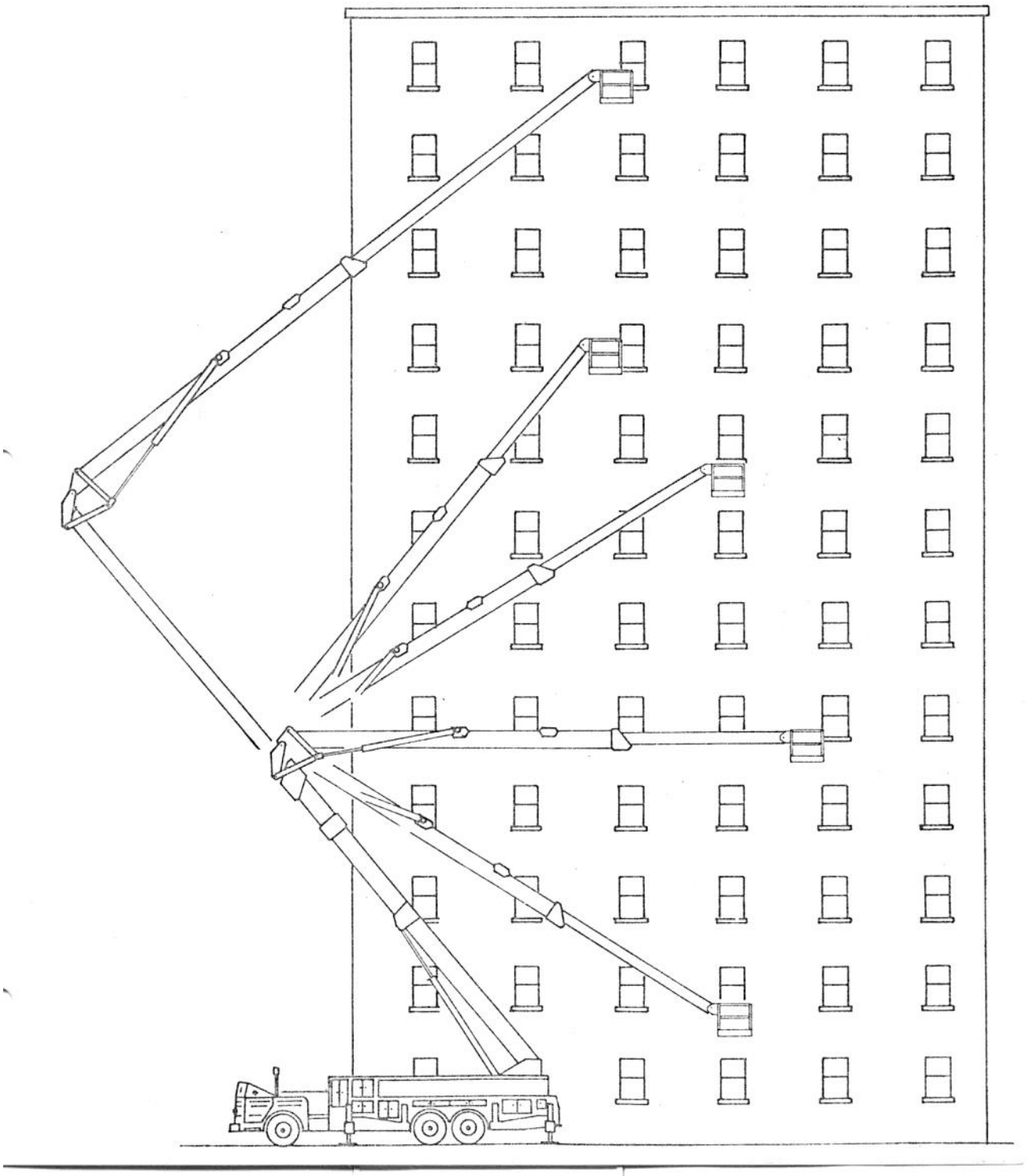
Aerial Platform, 8705

HORIZONTAL COVERAGE



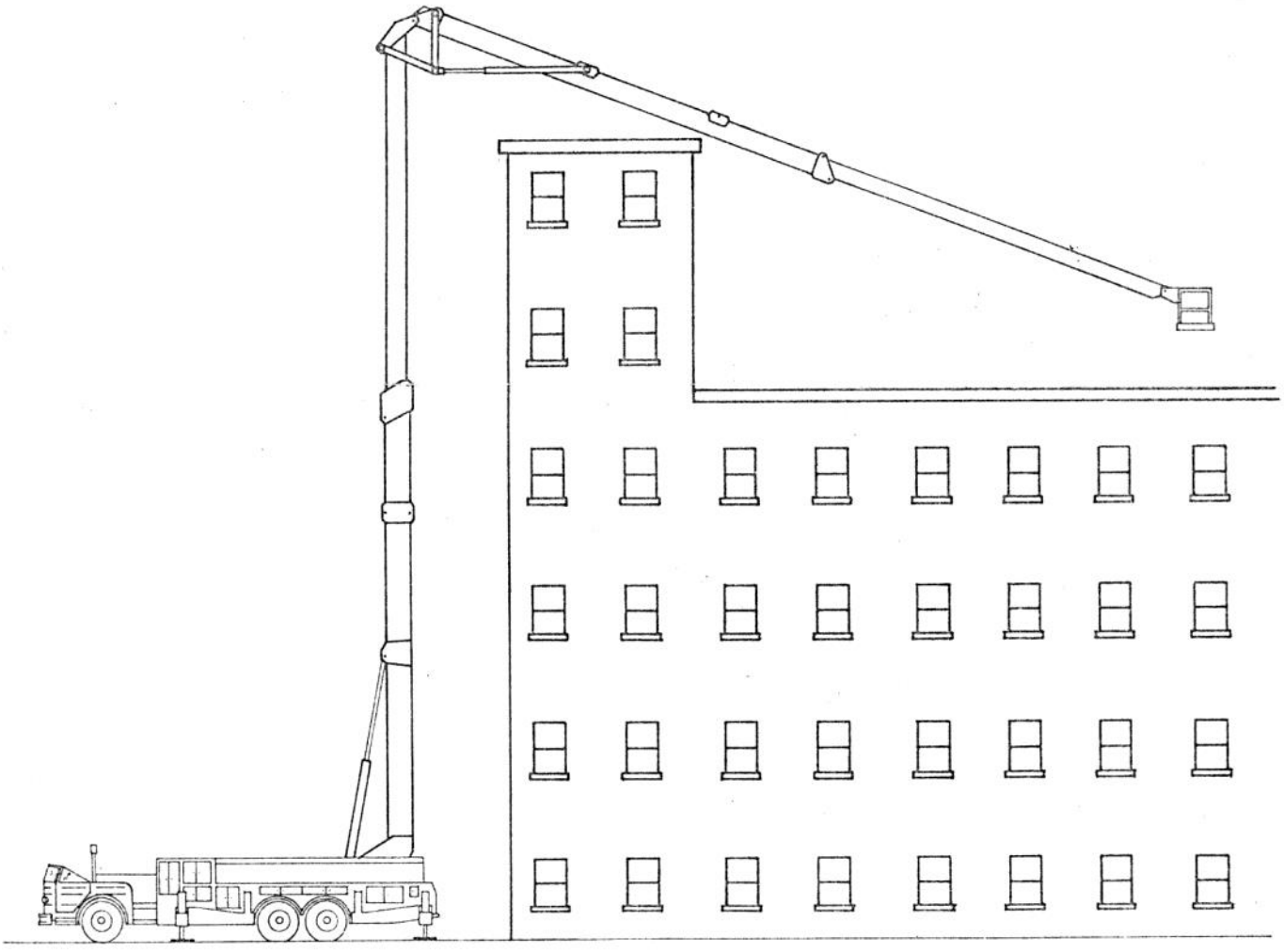
Aerial Platform, 8705

ARTICULATED COVERAGE



Aerial Platform, 8705

RECESSED BUILDING COVERAGE



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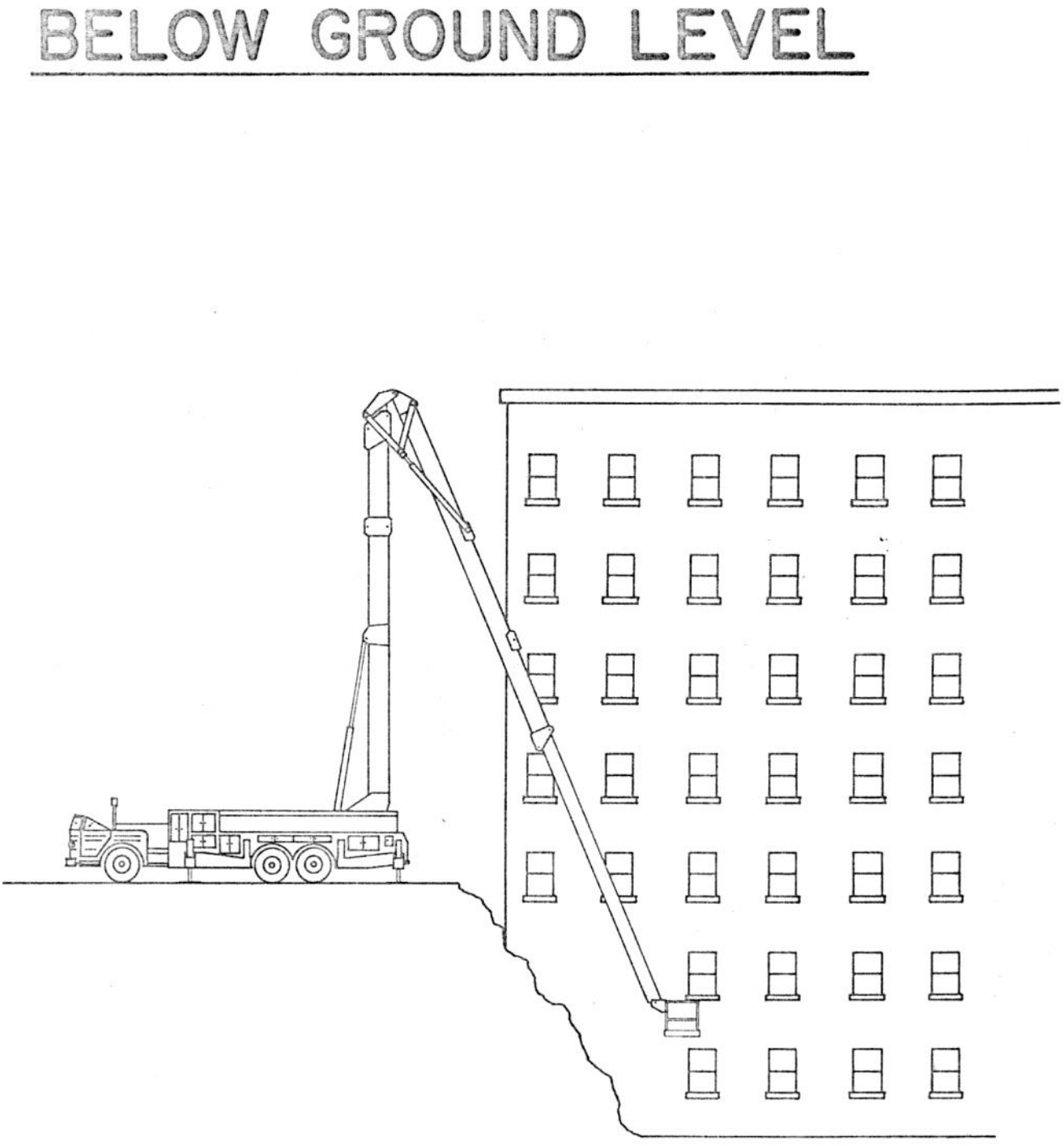
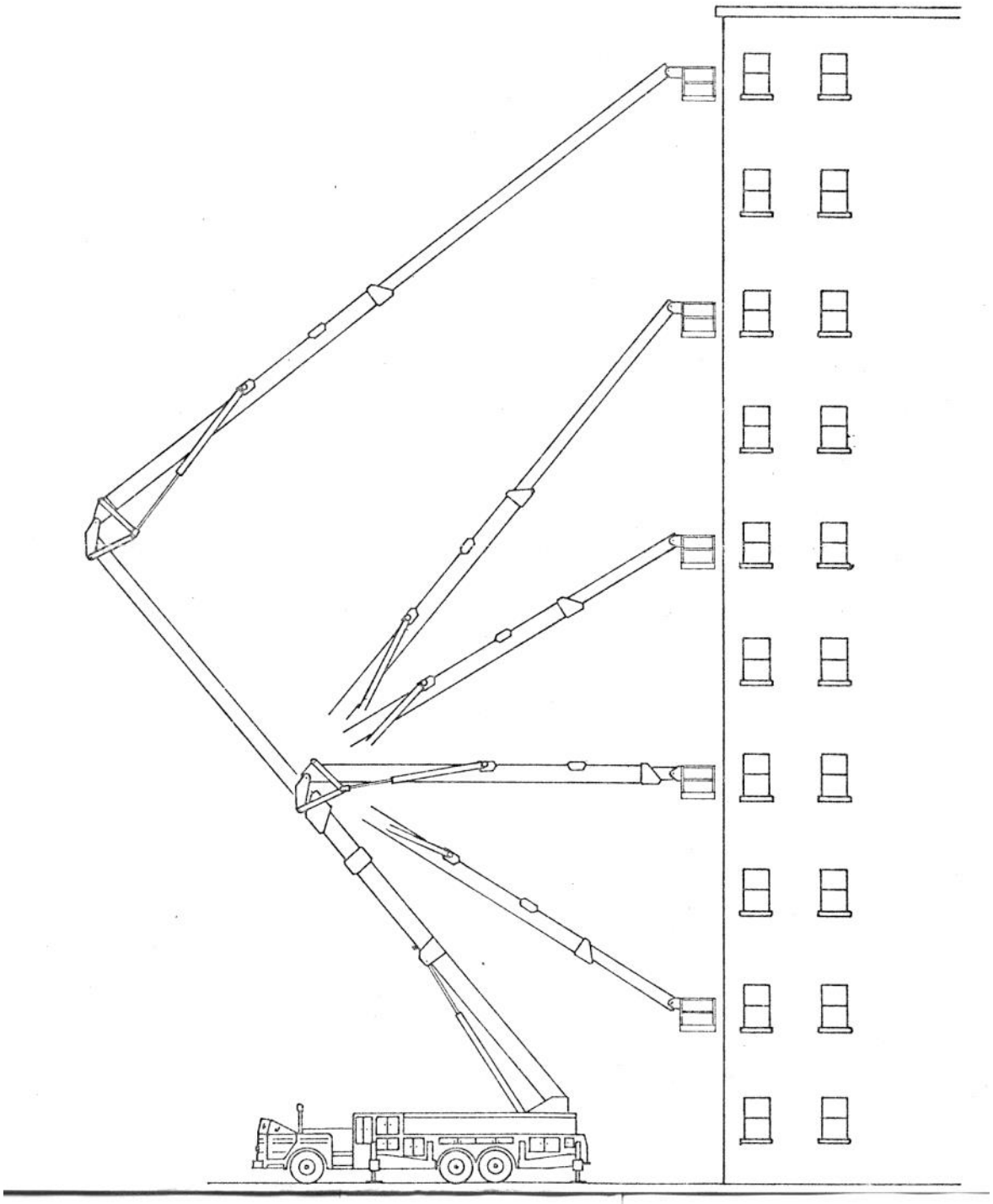


Aerial Platform, 8705

VERTICAL PLATFORM MOVEMENT



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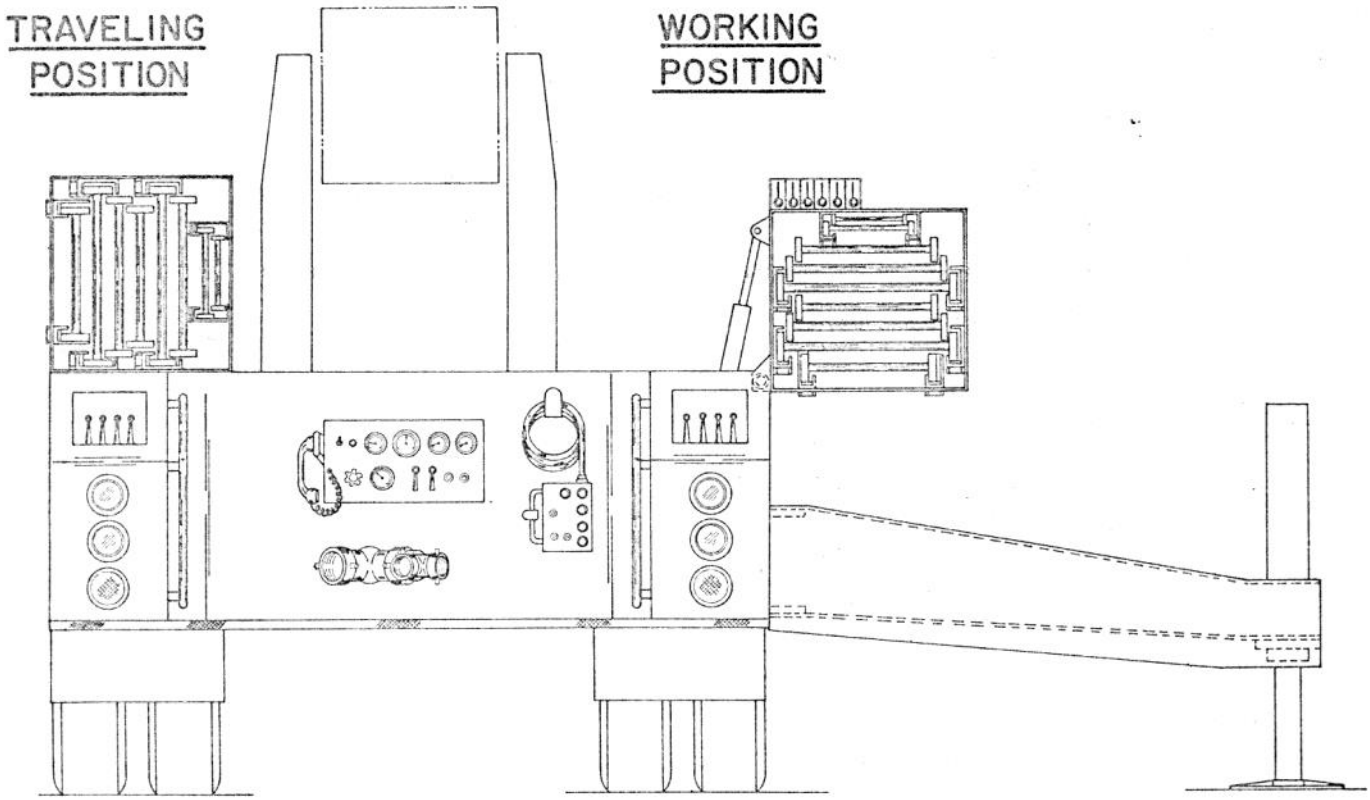
LADDER STORAGE



Aerial Platform, 8705

2072-672-S

ONE CALAVAR FIREBIRD - MODEL 150 - EQUIPPED AS FOLLOWS:

1. CHASSIS

   A. 234" Wheelbase

   B. Engine - GM 8-V71/with N70 injectors

   C. 12 volt Delco Remy starting motor with starting switches and two solenoids installed in such a manner so either battery may be used for starting the engine.

   D. Alternator - 100 AMP, 12 volt, Leece-Neville alternator with heavy-duty regulator and 1,200 watt Leece-Neville transformer and rectifier to provide 110 volt DC current.

2. BATTERIES

   A. Two 12 volt 160 Ampere batteries installed in enclosed compartment

   B. Batteries shall be connected to the electrical system on a single pole, double throw switch so that battery can be used at any time to supply all electrical equipment.

   C. Battery change over switch shall be operated from control switch mounted on dashboard between seats.

3. TRANSMISSION

   A. Model HT-70 Allison 6 speed

4. AXLES

   A. Rear axle - 46,000 lb. capacity with inter-axle lock up feature

   B. Front axle - 18,000 lb.

5. STEERING GEAR

   A. Hydraulic Power Steering. Ross TE-71 Series

6. WHEELS AND TIRES

   A. Ten (10) Each, Budd 10-hole, 11-1/4 bolt circle - steel

   B. Tires - Rear 11.00 x 20 Michelin Model No. E20Y
      Front 16.5-22.5 Firestone Transparent

7. BRAKES

A. Bendix Westinghouse or equal air brake system

a. Compressor - 12 cu. ft. capacity, engine lubricated

b. Reservoirs

(1) 8" x 24" pilot reservoir
(2) Two 8" x 40-1/2" main reservoirs

c. Emergency Brake - capacity of holding apparatus on 25% grade

d. Gauges - mounted dash

(1) Air Reservoir
(2) Line pressure
(3) Red warning light to indicate low air pressure and buzzer

8. SPRINGS

A. Type - semi elliptical leaf

B. Capacity - 9,000 lbs. @ ground

9. SUSPENSION

A. Hendrickson Tandem with rubber cushions

B. Capacity - 46,000 lbs.

10. FRAME

A. Torque box design - channel type

B. Tow hooks (2) mounted on front of apparatus securely welded to the frame

11. FUEL SYSTEM

A. Two (2) 50-gallon fuel tanks

B. Fuel gauge installed on dashboard

C. Fuel filter

12. LIGHTS AND WIRING

A. All wiring run in flexible, non-metallic tubing with junction boxes at suitable points.

B. All circuits equipped with automatic re-set thermal circuit breakers

C. Two (2) red 360° rotating lights mounted on cab, one each side aerial unit.

D. Two (2) chrome-plated spotlights, one each on left and right front

E. Two (2) chrome-plated white spotlights with flood lenses mounted one each on the left and right side rear of the apparatus.

F. Two (2) chrome-plated sealed beam spotlights, one each right and left front to apparatus, inside control.)

G. One (1) hooded 15 CP with switch mounted right side of dashboard map light.

H. All hinged door compartment, including glove compartments equipped with dome type lights with fused white lens and switch to turn light on when door is opened.

J. Directional lights class A, Type 1, front self-cancelling.

K. Instrument lights: suitable for illuminating all instruments on operator's panel rheostat operated.

L. Dome light with wire lens guard installed at front, not more than six inches from top of front equipment well, connected to the compartment light circuit.

M. Interior of cab is equipped with two (2) ceiling type dome lights of not less than 12 cp each, one each over front and rear seats. Lights are controlled by a separate dash-mounted switch and so arranged that the lights shall automatically turn on when either of the cab doors are opened.

13. WARNING DEVICES

A. Air horn controlled from steering wheel.

14. DRIVER'S COMPARTMENT

A. Cab

a. Ahead of engine design

b. Seats separate driver's seat -- 4 way adjustable; two-man, seat located to the right of driver's seat; jump seats (1) each side behind driver's compartment. All seats upholstered in heavy-duty naugahyde.

14. DRIVER'S COMPARTMENT - continued

c. Seat belts - five sets automatic safety belts installed
d. Windows - roll down door windows with adjustable wind wings; sliding glass partitions between front seat and rear jump seats.
e. Engine compartment and hood insulated
f. Windshield wipers (2) air operated
g. Mirrors (2) chrome plated, 6" x 16" mounted one each left and right side.
h. Instruments
   (1) Tachometer
   (2) Speedometer
   (3) Fuel gauge
   (4) Engine oil pressure gauge
   (5) Engine water temperature gauge
   (6) Ammeter
   (7) Vacuum gauge
k. Heater - heavy-duty heater and defroster with variable speed control.

1. CHASSIS BODY

The design of the body is such that it is aesthetically pleasing as well as the utilization of all available space as storage compartments. The body is of an all welded steel construction. Top of side compartments or ladder racks are covered on top with non-skid material to form a catwalk on body sides. Hand holds are located at various points to assist personnel when entering access areas. Steps are provided on each side of body behind cab to facilitate entry to storage well. All steps are constructed of Diamondette type material.

A. COMPARTMENTATION

Size and location of compartments are as illustrated in Figure 1 attached. The compartments are totally enclosed and are constructed of 16 gauge sheet steel. Drain holes are located on bottom of compartments to enable undue moisture to drain out.

The compartment doors are of the slab type with an internal box frame structure for added rigidity. The doors are constructed of 18 gauge steel and are equipped with a PVC foam seal for watertight purpose. The door is held in position by means of a chrome plated continuous hinge containing a brass pin. One side of the hinge is permanently fastened to the door and the other side is bolted to the support structure. This permits the door to be easily removed for replacement purposes.

Each compartment door is equipped with a "D" handle latch. The latch is a 2 point positive bolt twist type and is recessed in door for flush installation. The "D" handle is chrome plated and entire lock assembly can be removed for maintenance or replacement.

Each compartment is equipped with a light to illuminate the interior and is only operational when door is open. The master switch for the lights is located in the vehicle cab. A red warning light is installed on cab dash and becomes activated when a compartment door is open.

B. LADDER COMPARTMENT

Located on each side on top of compartments are compartments for ladder storage or ladder racks. These ladder racks are totally enclosed and are capable of storing approximately 208 feet of ladders. The ladder compartments are constructed of 18 gauge sheet steel on three sides covering the square tube support structure. The top of the compartments is covered with aluminum painted diamondette plate to form a catwalk with compartments in stored position. To facilitate placement or removal of ladders, the compartment is hydraulically operated to swing or rotate 90° downward. This is controlled from rear ground station. Ladders are stored on tracks and sit in vertical position with compartment in stored position.

C. DECK COMPARTMENTS

Located on the body deck, between the side compartments, are three additional compartments. Refer to Figure 1 for location and size. These compartments are complete boxes with aluminum painted diamondette plate on top surface. These boxes are bolted to the structure, thereby permitting them to be removed, if so desired.

D. FENDERS, RUNNINGBOARDS, TAILBOARD

Streamlined fenders conforming to the general lines of the apparatus are provided. Also, sufficient clearance between fenders and tires is provided with vehicle loaded and stationary to permit cleaning of tires and underneath portion of fenders. The running board, tailboard and other walkways are constructed of 1/8" diamondette plate, aluminum painted.

AERIAL PLATFORM

A. Main Frame

1. Welded steel structure for attachment of turret to chassis

B. Outriggers

1. Two (2) heavy-duty telescopic type, lateral spread 23 feet

2. Eight (8) inch ground penetration

3. Leveling jacks provided ahead of rear bogie and independently controlled with positive locking features in any position

NOTE: Controls for outriggers and leveling jacks located at rear corners of truck.

C. Turntable

1. Slewing ring provides moment rating of 300,000 foot pounds.

2. Mounted on Monorace Slewing Ring.

3. Assembly contains double reduction power drive assembly

D. Hydraulic System

1. Closed center hydrostatic type

2. Pilot operated check-valves installed on all hydraulic cylinders

3. Manual overrides on control valves

4. Auxiliary electrically operated hydraulic system

5. Outrigger interlocks

6. Entire hydraulic system to conform to J.I.C. standards

E. Boom Standards

1. Four (4) boom sections, two of which telescope

2. Interlocking features provided to prevent lower boom from articulating more than 30°.

E. Boom Standards - continued

3. Upper boom capable of movement to maximum of 165°.

4. Boom rests canted at approximately 25°.

NOTE: All motions of upper and lower boom and platform contain failsafe actuation provisions.

F. Controls

1. The controls for all boom functions electro-servo type

2. A remote control box with deadman and throttle control with 50 feet cord. Control box to contain selector switch to override platform control.

3. A ground control accessory panel provided at rear of apparatus containing the following:

a. Starter

b. Auxiliary System Switch

c. Load instruction plate

d. Hydraulic System Pressure Gauge

e. 0-400# water pressure gauge, 3-1/2 inches in diameter

f. Engine temperature gauge

g. Intercom receiver

h. Engine oil pressure gauge

G. Platform

1. Integral metal frame with non-skid floor of expanded metal hydraulically leveled capable of rotating 45° right and left from center.

2. Safety rail 42 inches high around perimeter of platform

3. Center rail 24 inches high

4. Kick plate 6 inches above floor around entire platform

5. Protective shielding and personal harness and belts

6. Platform provided with steps on outside at port of entry full width.

G. Platform – continued

7. Platform shall be wired and have two (2) waterproof type covered outlets, two-prong twist lock.

8. Two-wire circuit from ground control for PA system.

9. Auxiliary 2-1/2 inch NSM capped outlet.

H. Water System

1. Capable of 1,000 gpm through minimum 4 inch telescoping, waterline with minimum 4 inch x 3 x 3 NSF Siamese with Clappets. Inlet provided with protective plug.

2. Adjustable relief valve in the base piping for discharging excessive water.

3. Above piping equipped with butterfly valve and shall terminate at control platform into Stand "Intelligiant" Monitor, Model MSP030, stainless steel polished, 1,000 usg per minute.

4. Two (2) monitors capable of moving water stream upward and downward and horizontally 45°.

5. The monitor shall have the following tips:

   a. 1-1/4"

   b. 1-1/2"

   c. 1-3/4"

   d. 2"

   e. 2-1/4"

6. Length tips 12" mounting brackets furnished Akron Style #353, Tri-Loc

   Note: All discharge gates, hose fitting, coupling and gasket recesses shall conform to dimensions and tolerances as described in NBFU Pamphlet 194.

I. Oxygen System

1. An oxygen system shall be provided from base of boom to platform and consist of air tank mounted on side of lower boom, air line to platform with disconnect, and all necessary filters, relief valves and regulators.

J. Ladders

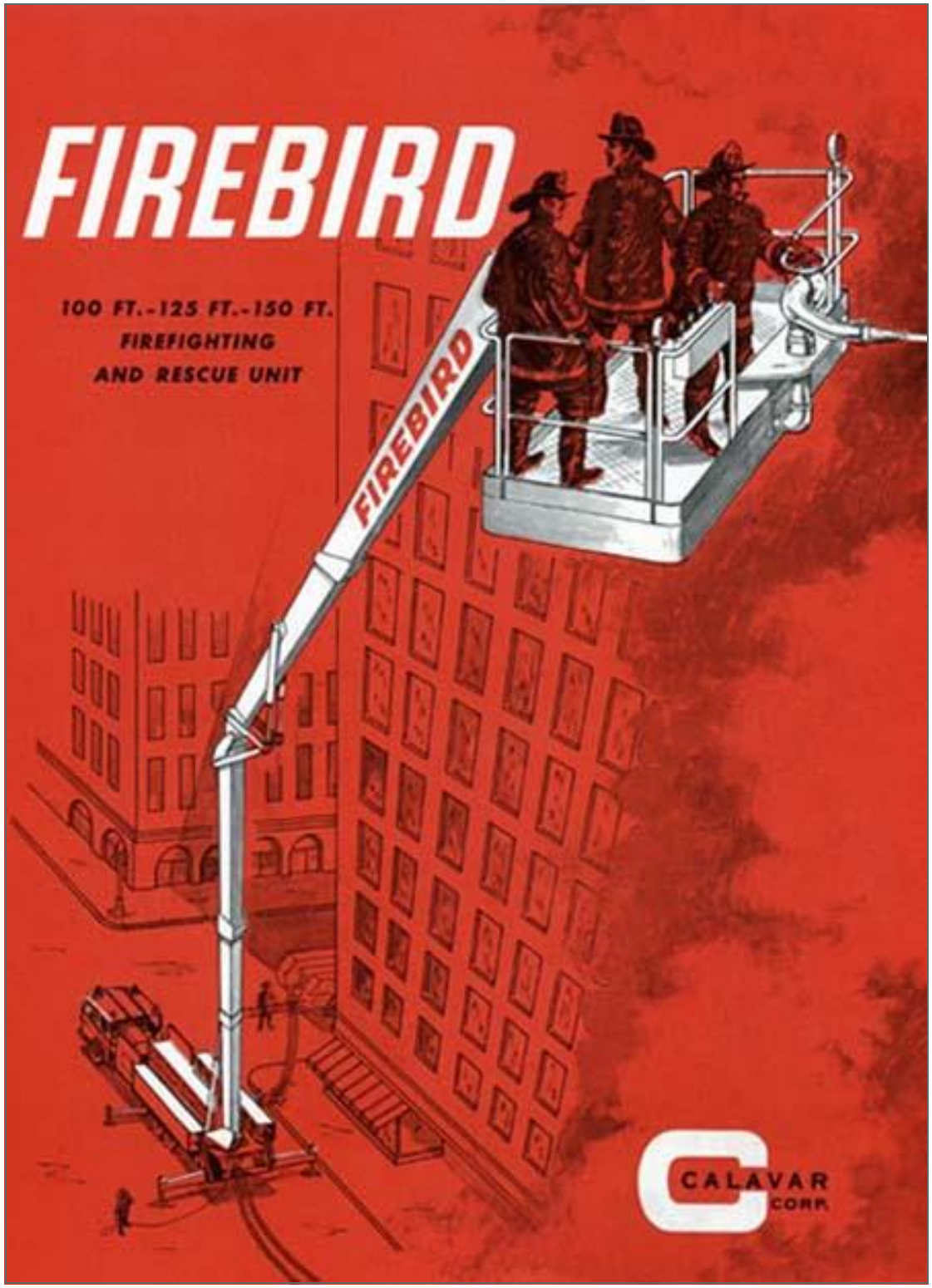
1. One each: No. 40"-LDL-8 Extension Ladder, 36"-LDL-6 Extension Ladder, PEL-28 Extension Ladder, 20'-RL-5 Trussed Single Ladder, FL-10 Folding Ladder, PRL-16 Solid Side Roof Ladder with Folding Hooks, PRL-12 Solid Side Roof Ladder with folding hooks, CJL-3 Extension Ladder.

Aerial Platform, 8705

Courtesy http://www.google.com/imgres? 1970 print ad

Aerial Platform, 8705

Courtesy http://www.google.com/imgres?



Aerial Platform, 8705

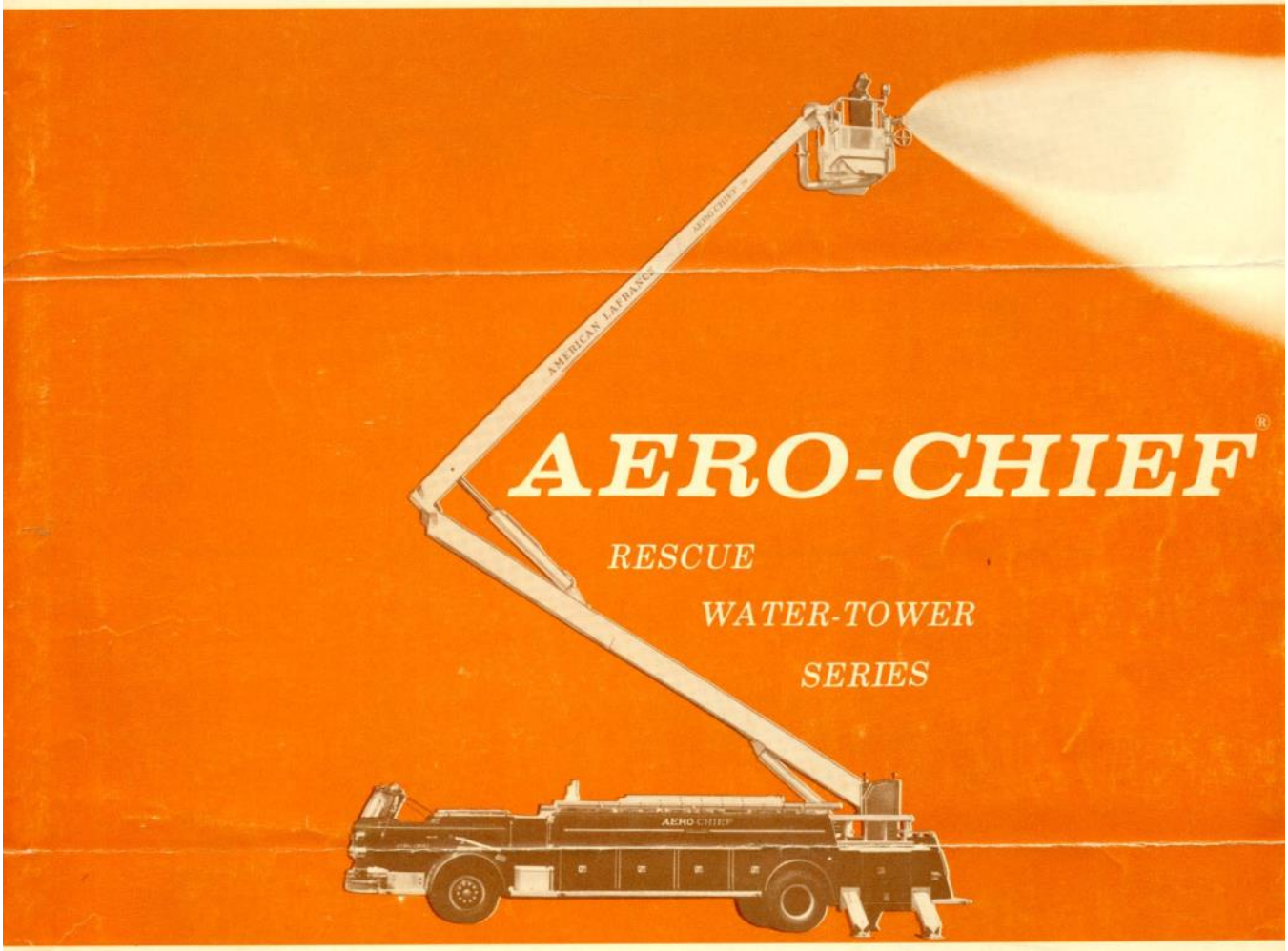
Courtesy http://www.google.com/imgres?

Aerial Platform, 8705

Courtesy Roberts Collection:

AMERICAN LAFRANCE

The TRUSTED Name in Fire-Fighting Apparatus
announces



AERO-CHIEF®

RESCUE
WATER-TOWER
SERIES

AMERICAN LAFRANCE Quality and Reliability plus
6 EXCLUSIVE FEATURES

1. *Longest Reach - Greatest range of action.*
2. *Greater Water Tower Capacity.*
3. *Lowest Friction Loss in piping water to the turret. Less pump pressure required.*
4. *Largest Turntable Bearing Rings for maximum stability with smooth control.*
5. *Lowest Overall Height.*
6. *Designed For Fire Service - Engineering based upon experience and needs of the fire service, NOT an adaptation from other useage.*

Aerial Platform, 8705

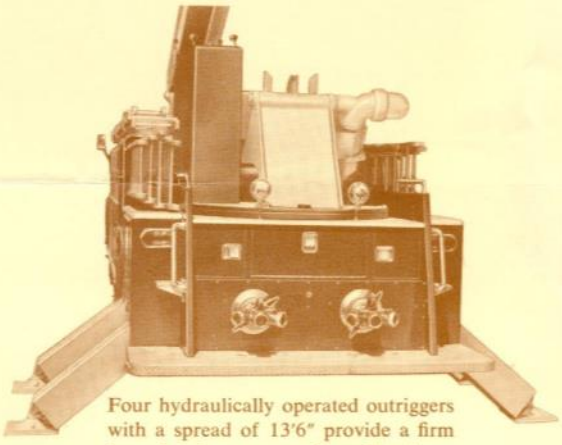
Courtesy Roberts Collection:

LOWEST OVERALL HEIGHT

The American LaFrance "AERO-CHIEF" with the boom nested in standard travelling postion, has an overhead height of only 10 feet 6 inches*. This easily clears most overhead obstacles. (Standard height for commercial tractor-trailers is about 12½ ft.)

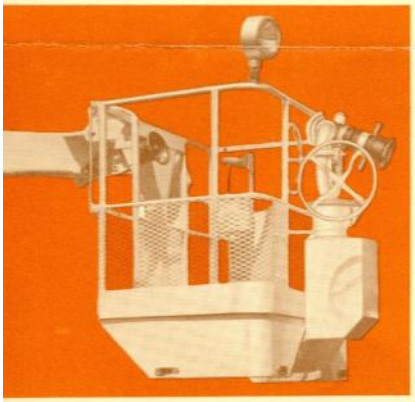
*Where overhead station door clearance is a factor, American LaFrance offers an exclusive optional extra feature. Hydraulically operated split-windshield allows lowering the boom to an overall height of only 9 feet. Vehicle can be operated in this position for parking or driving under extremely low viaducts.

STABLE BASE



Four hydraulically operated outriggers with a spread of 13'6" provide a firm base for boom operation. The large turntable with a bearing diameter of 65" and double row ball bearings further assures stability and smooth, accurate control. Base controls for boom and platform operation are mounted on lighted pedestal on turntable for safety and convenience. These controls override platform controls when required.

OPERATOR'S PLATFORM



For operation of nozzle and rescue work, the 36" x 60" platform provides ample work area. The guard rail (43" high) has two gates. Shown is the basket control mechanism, the communication loud speaker, the 230,000 candlepower searchlight and 1,000 gpm nozzle. Cleanly designed front of basket facilitates rescue.

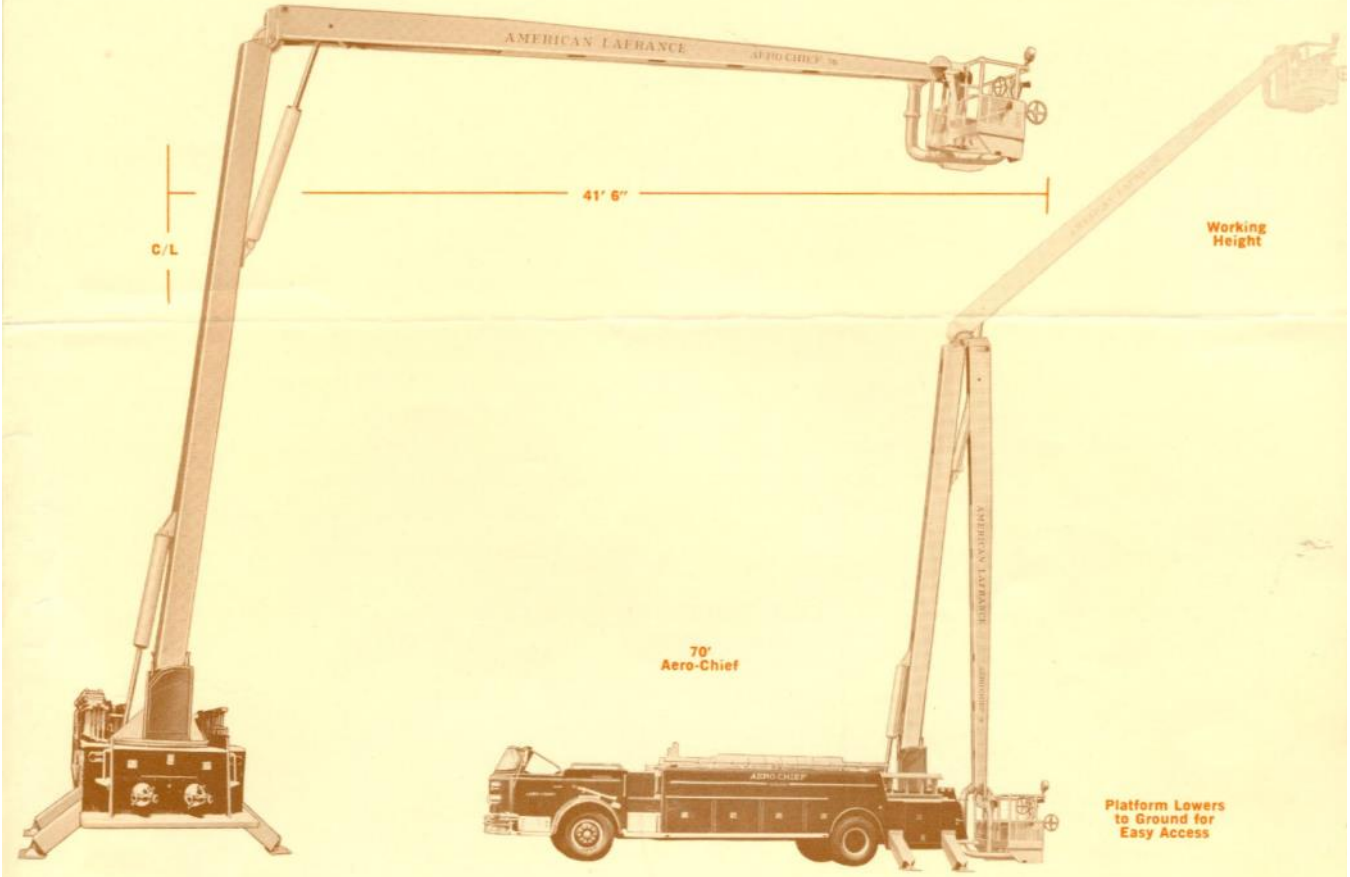
Copyright 1962
American LaFrance
Division of Sterling Precision Corp., Elmira, N. Y.

Aerial Platform, 8705

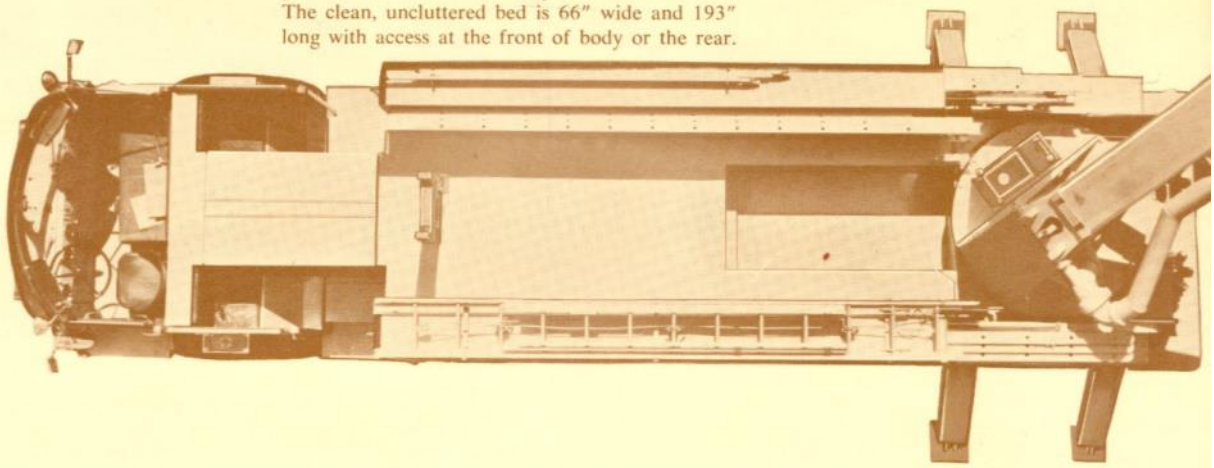
Courtesy Roberts Collection:

The "Aero-Chief" was engineered and designed specifically for the fire service. Long and careful evaluation of requirements has resulted in apparatus completely fitted for the demands of fire fighting operation.

FROM EVERY ANGLE



The body of the "AERO-CHIEF" is designed to provide a maximum of utility for fire service use. The clean, uncluttered bed is 66" wide and 193" long with access at the front of body or the rear.



Aerial Platform, 8705

Courtesy Roberts Collection:

OUTSTANDING - FEATURE BY FEATURE

	70′	80′	90′
Overall Length	40′ 0″	45′ 0″	50′ 0″
Overall Height, nested -open seat only	10′ 6″	10′ 6″	10′ 6″
Overall Height, nested, min. optional-open seat only	9′ 0″	9′ 0″	9′ 0″
Overall Width	96″	96″	96″
Wheelbase	220″	220″	220″
Ground to platform-working height	70′	80′	90′
Horizontal reach—maximum	41′ 6″	46′ 6″	51′ 6″
Upper boom length	34′ 0″	39′ 0″	44′ 0″
Lower boom length	31′ 0″	36′ 0″	41′ 0″
Operating Time: Set outriggers	20 sec.	20 sec.	20 sec.
Raise lower boom	30 sec.	30 sec.	30 sec.
Raise upper boom	38 sec.	38 sec.	38 sec.
Rotate 360°	40 sec.	40 sec.	40 sec.
Load rating for platform	1,000 lbs.	1,000 lbs.	1,000 lbs.
Test load for platform	1,400 lbs.	1,400 lbs.	1,400 lbs.
Friction loss in piping base inlet to nozzle 1,000 gpm rate	55 lbs.	59 lbs.	64 lbs.
Compartments:	Eleven waterproof enclosed compartments for storage		
Ladders:	208 ft. of ladders in assorted lengths in accordance with N.B.F.U. Spec. 19.		
Communication System:	2 way voice between platform and ground control.		

STANDARD EQUIPMENT

- Two (2) Axes, fire department pick head type.
- Two (2) Axes, fire department, flat head type.
- Four (4) Hand lanterns, 6 volt electric, fire department type.
- Two (2) Crowbars, 50 inch, forged steel—cadmium plated.
- One (1) Claw tool, 30 inch.
- Two (2) American LaFrance 20 pound pressurized dry chemical extinguishers.
- Two (2) Scoop shovels, long handle.
- Two (2) Shovels, short "D" handle.
- 125 feet, manila rope, ⅝ inch diameter.
- 125 feet, manila rope, ¾ inch diameter.
- Two (2) 8 ft. pike poles.
- Two (2) 12 ft. pike poles.
- Two (2) 16 ft. pike poles.

PUMPERS

Rated Capacities (Class A)
500-1500 g.p.m.

AMERICAN LAFRANCE
A DIVISION OF STERLING PRECISION CORPORATION
ELMIRA, N. Y.

AERIALS

65-100 ft.
4 wheel or tractor drawn

The new American LaFrance "AERO-CHIEF" Series now takes its place along with the performance proven "900 Series" pumpers and aerial ladder apparatus in the most complete line of fire fighting equipment available.

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Greater Tucson Fire Foundation

Thanks you for taking an interest in Tucson Fire Department history —

This is one of many sections that contain information, documents, letters, newspaper articles, pictures, etc. They have been collected and arranged in chronological order or by a subject. These items were collected, organized and entered into a computerized database by Dave Ridings Assistant Chief Tucson Fire Department, Al Ring friend of the department, Greater Tucson Fire Foundation and with the help of many friends and fellow firefighters.

All graphics have been improved to make the resolution as good as possible, but the reader should remember that many came from copies of old newspaper articles. This also applies to other items such as documents, letters, etc.

Credit to the source of the documents, photos, etc. is provided whenever it was available. We realize that many items are not identified and regret that we weren't able to provide this information. As far as the newspaper articles that are not identified, 99% of them would have to be from one of three possible sources. The *Arizona Daily Star,* The *Tucson Citizen* and the *Tucson Daily Citizen,* for which we want to give a special thanks.

Please use this information as a reference tool only. If the reader uses any of the information for any purpose other than a reference tool, they should get permission from the source.

Should the reader have additional information on the above subject we would appreciate you sharing it with us. Please see the names and contact information on the 1st. TFD Archives page right below this paragraph.