APPARATUS OPERATOR 1C
AERIAL TRUCK DRIVER/OPERATOR
EMERGENCY VEHICLE OPERATIONS
Course Outline

Course Objectives: To provide the student with...

a) Information on driver responsibilities, recognized standards, and related laws for tiller and straight bodied aerial fire apparatus.

b) Information and techniques on basic inspections, documentation, maintenance, and trouble shooting Aerial fire apparatus.

c) Information and techniques on driving and positioning Aerial fire apparatus.

d) The opportunity to increase their driving skills during simulated driving conditions.

Course Content ................................................................. 40:00

Unit 1: Introduction
1-1 Orientation and Administration ...........................................1:00

Unit 2: Legal Aspects of Emergency and Non-emergency Driving
2-1 Fire Apparatus Driver/Operator Responsibilities ..................0:10
2-2 California Vehicle Code ..................................................0:30
2-3 County of Los Angeles Fire Department Policies and Procedures ..0:30
2-4 NFPA Standard 1002 – Fire Apparatus Driver / Operator Professional Qualifications .0:05
2-5 NFPA Standard 1451 – Fire Service Vehicle Operations Training Program .............0:05
2-6 NFPA Standard 1500 – Fire Department Occupational Safety and Health Program ...0:05
2-7 Evidence Code 669 .........................................................0:05
2-8 Title 49, CFR ...............................................................0:05
2-9 Liability Issues .............................................................0:20
2-10 Driving Under the Influence (DUI) Laws .........................0:10
2-11 Penalties .................................................................0:10
2-12 Driver License Requirements ........................................0:15

Unit 3: Defensive and Safe Driving of a Aerial Fire Apparatus
3-1 Fire Apparatus Driver/Operator Responsibilities ..................0:10
3-2 Los Angeles County Fire Department Policies and Procedures ...............0:15
3-3 NFPA Standard 1451 – Fire Service Vehicle Operations Training Program ....0:05
3-4 NFPA Standard 1500 – Fire Department Occupational Safety and Health Program ...0:05
3-5 NFPA Standard 1915 – Fire Apparatus Preventative Maintenance Program .......0:05
3-6 Defensive Driver Qualities .............................................0:30
3-7 Driving Apparatus to Incidents ........................................0:20
3-8 Principles of Braking and Stopping .................................................................0:15
3-9 Principles of Steering and Load Control ..........................................................0:30
3-10 Driving During Adverse Weather Conditions .................................................0:10
3-11 Principles of Emergency and Non-Emergency Driving .................................0:15

Unit 4: Apparatus Log Book
4-1 Fire Apparatus Driver/Operator Responsibilities ..............................................0:10
4-2 Apparatus Log Forms .......................................................................................0:20
4-3 Apparatus Inventory Forms ..............................................................................0:10

Unit 5: Aerial Apparatus Operations
5-1 Cab Operation ...................................................................................................0:20
5-2 Turntable Operation .........................................................................................0:30
5-3 Out-rigger operation .........................................................................................0:20
5-4 On-board generator and electrical system .........................................................0:20
5-5 Tiller responsibilities .........................................................................................0:20

Unit 6: Pre-trip Inspection Procedures
6-1 Pre-trip Policies ................................................................................................3:00
6-2 Pre-trip Exercises ..............................................................................................4:00

Unit 7: N.F.P.A. Recommendation Pamphlets 1901,1911
7-1 1901 .................................................................................................................1:00
7-2 1911 .................................................................................................................1:00

Unit 8: Inspection, Basic Maintenance, Documentation, and Troubleshooting
8-1 Fire Apparatus Driver/Operator Responsibilities ..............................................0:10
8-2 Basic Inspection, Maintenance, and Troubleshooting .....................................0:30
8-3 Drive Line, Transmissions, and Differentials ....................................................0:10
8-4 Brake Systems ..................................................................................................0:40
8-5 Steering Systems ...............................................................................................0:20
8-6 Trailer Systems and Components ..................................................................0:30
8-7 Ladder Systems ...............................................................................................0:30
8-8 Out of Service Criteria ....................................................................................0:10
8-9 Lubrication Procedures .....................................................................................0:15
8-10 Repair Procedures ..........................................................................................0:15
8-11 Lubrications ................................................................................................. Handout Only
Unit 9 : Ladder Operations

9-1 Elevating the ladder (Outriggers, Raise, Rotate, Extend, Lower, Retract, Bed) ..........0:30
9-2 Ladder Hydraulic Override Procedures .................................................................0:20
9-3 Practical Application .........................................................................................4:00

Unit 10 : Apparatus Placement

10-1 General Apparatus Placement .............................................................................0:10
10-2 Apparatus Placement at Rescues .......................................................................0:10
10-3 Apparatus Placement at Freeway Incidents ......................................................0:10
10-4 Apparatus Placement at Hazardous Materials / Terrorism Incidents .............0:10
10-5 Apparatus Placement at Structure Fires ..............................................................0:20
10-6 Apparatus Placement Near Railroad Incidents ....................................................0:10
10-7 Apparatus Security ..............................................................................................0:10

Unit 11: Emergency Operations

11-1 Hydraulic system over-view ................................................................................0:30
11-2 Electrical system ................................................................................................0:30
11-3 Over-rides ...........................................................................................................0:30

Unit 12: Fire Shop Support

Fire Shop Annual U.L. Ladder Test Demonstration ..................................................2:00
Symposium : Lessons Learned from the Field & The Shop led by
Senior Mechanic Jack Kou and Assistant Fire Chief Chris Marangakis ...........1:00

Unit 13: Tiller Position Instruction

13-1 Classroom Presentation .......................................................................................1:00
13-2 Psychomotor Lessons .........................................................................................2:00

Unit 14 : Skills Driving Event

14-1 Introduction to County of Los Angeles Fire Department Driving Skills (Tiller Truck
Rodeo) .....................................................................................................................0:30

Unit 15 : Optional Driving Exercises

15-1 National Association of Professional Drivers (N.A.P.D.) Driving Exercises .......1:00
15-2 Practice and Testing the Driving Exercises (Engineer & Tiller Operator Positions). 10:00
COURSE OUTLINE

June 2009

APPARATUS OPERATOR 1C

Unit 16: Testing
Certification Exam .................................................................3:00

Supplemental / Optional Student Task Book ........................................40.00

Texts and References
Apparatus Operator 1A Program, California State Fire Marshalls Office, State Curriculum
Apparatus Operator 1B Program, California State Fire Marshalls Office, State Curriculum
California Commercial Driver Handbook, DMV, 2007 Edition
Driver Awareness Instructor Course Manual, California Commission on Peace Officer
       Standards and Training, 1999 Edition
http://www.bendix.com/troubleshooting/
NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications NFPA,
       1998 Edition
NFPA 1451: Standard for a Fire Service Vehicle Operations Training Program, NFPA,
       2002 Edition
NFPA 1500: Standard on Fire Department Occupational Safety and Health Program, NFPA,
       2002 Edition
NFPA 1582: Standard on Medical Requirements for Fire Fighters NFPA, 2000 Edition
Webster’s Unabridged Dictionary, Random House, Second Edition
Manual D (Driving), Volume 8, County of Los Angles Fire Department
Truck Company Operations Training Guide, (Subjects 1 & 3), County of Los Angeles Fire
       Department
Manufacturers Specifications, County of Los Angeles Fire Department Vehicle Accident
       Prevention Program. 2008