

A Publication of the
**National Wildfire
Coordinating Group**

Sponsored by
United States
Department of Agriculture

United States
Department of the Interior

National Association of
State Foresters

Fire Behavior Nomograms



PMS 436-3
NFES 2220

MARCH 1992

The "Fire Behavior Nomograms" are excerpted from "How to Predict the Spread and Intensity of Forest and Range Fires", Richard C. Rothermel, June 1983, with the exception of the nomogram for fuel model #7 which was updated for this publication.

Additional copies of this publication may be ordered from:

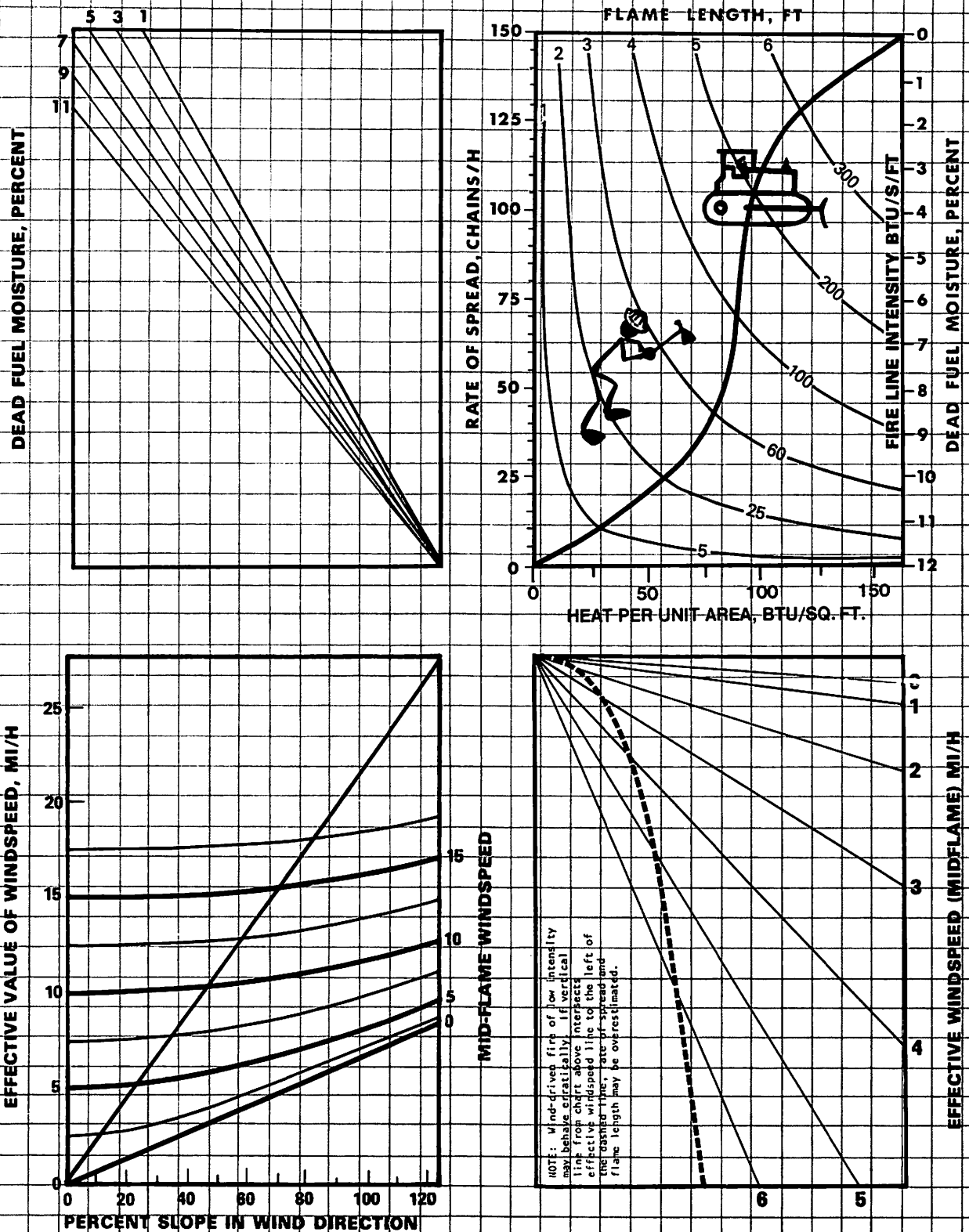
National Interagency Fire Center
ATTN: Supply
3833 S. Development Avenue
Boise, Idaho 83705

Order NFES # 2220

APPENDIX A Nomograms

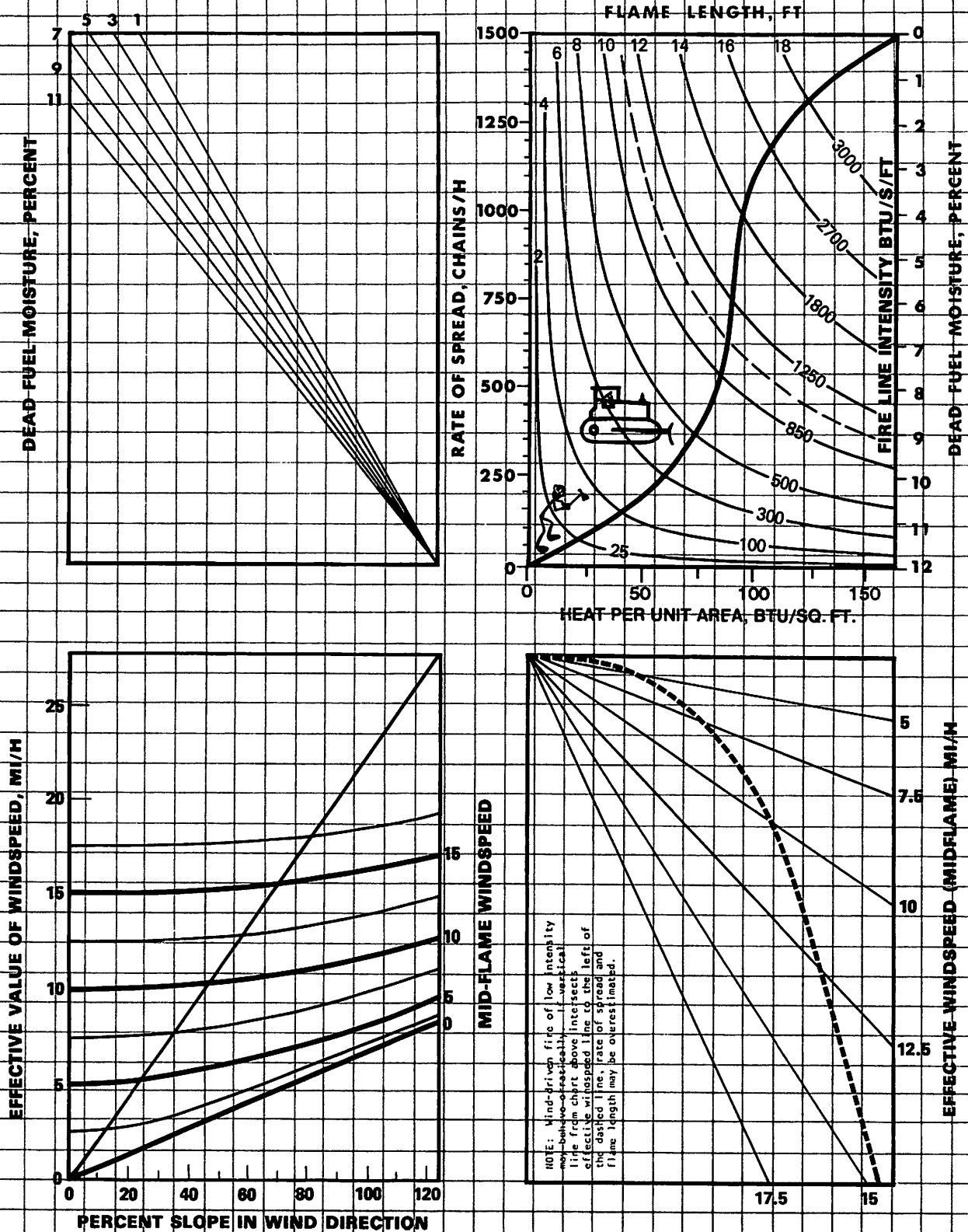
Fuel model 1 - low windspeeds

1. SHORT GRASS (1 FT) - LOW WINDSPEEDS



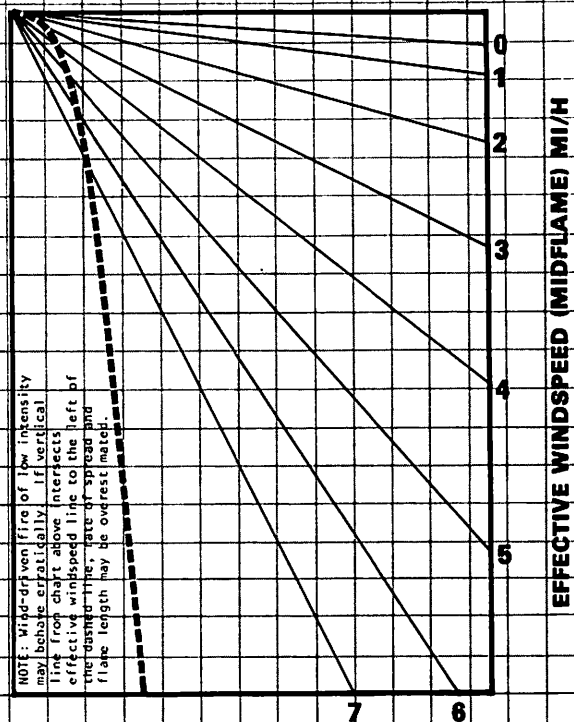
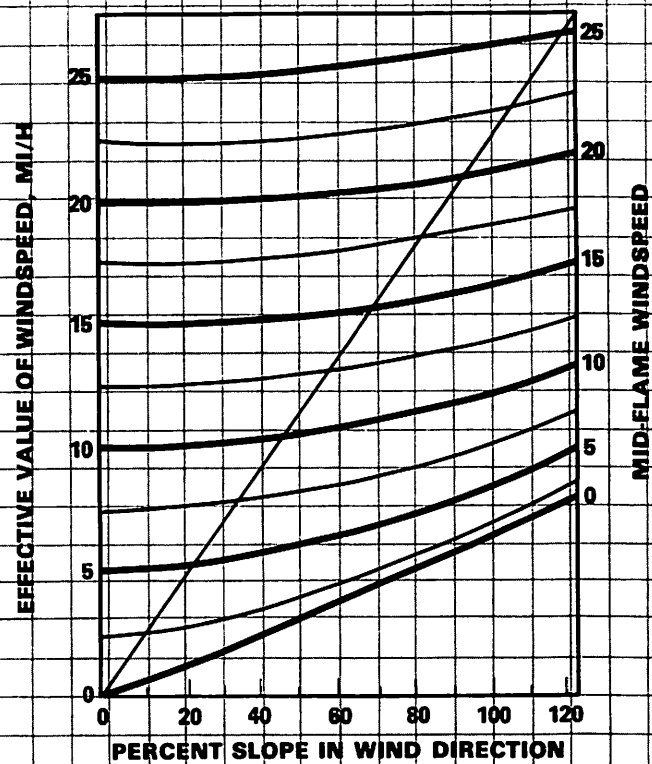
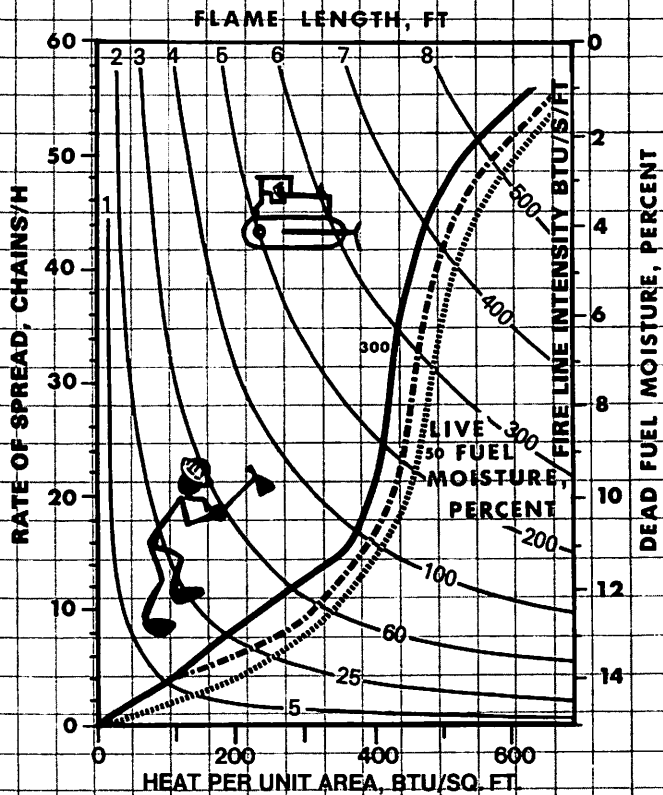
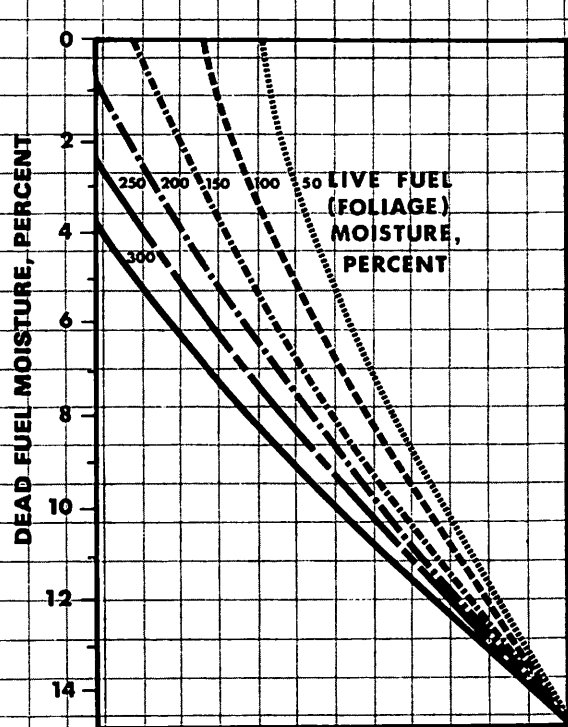
Fuel model 1 - high windspeeds

1. SHORT GRASS (1 FT) - HIGH WINDSPEEDS



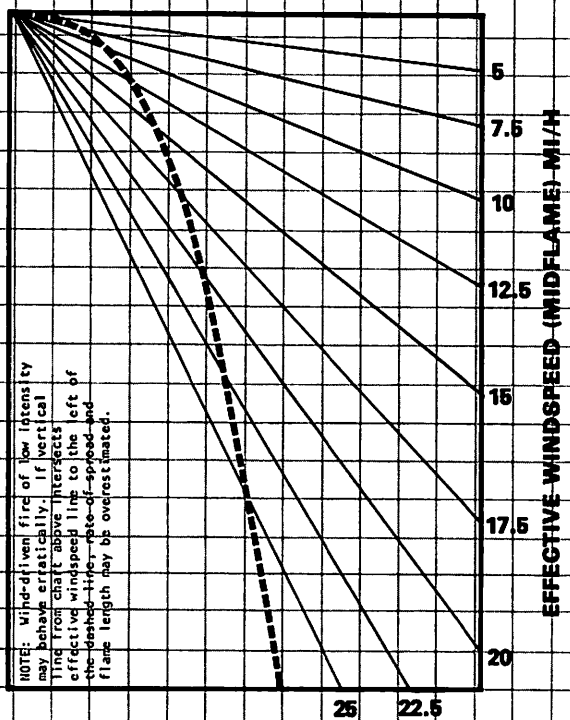
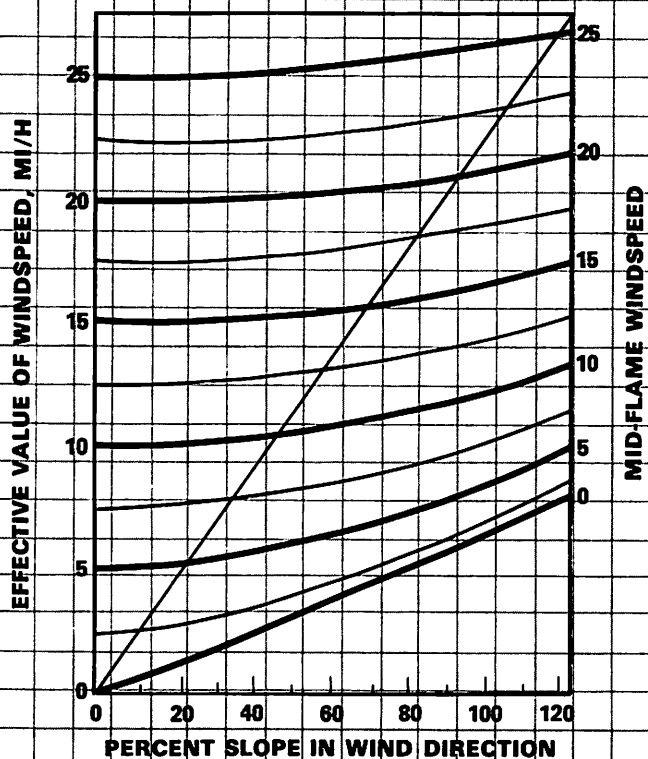
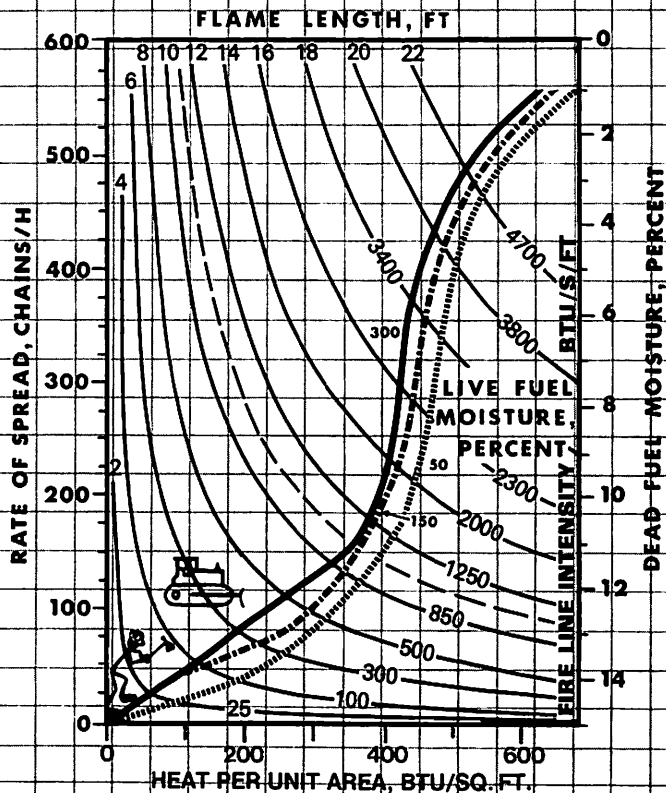
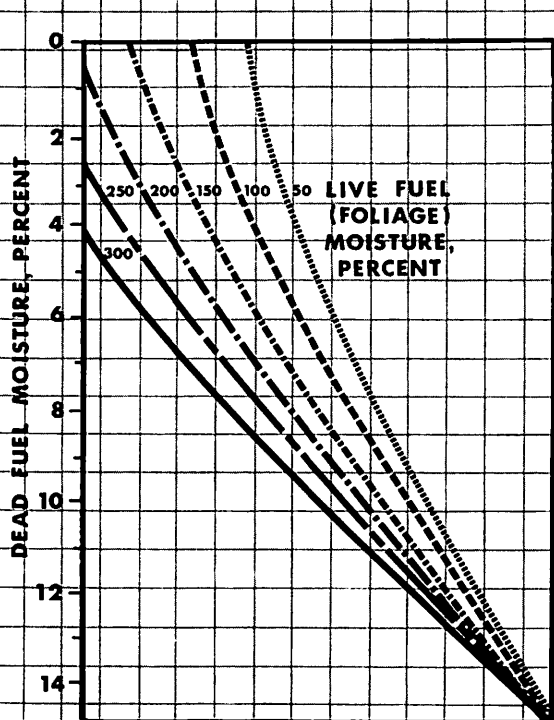
Fuel model 2 - low windspeeds

2. TIMBER (GRASS & UNDERSTORY) - LOW WINDSPEEDS

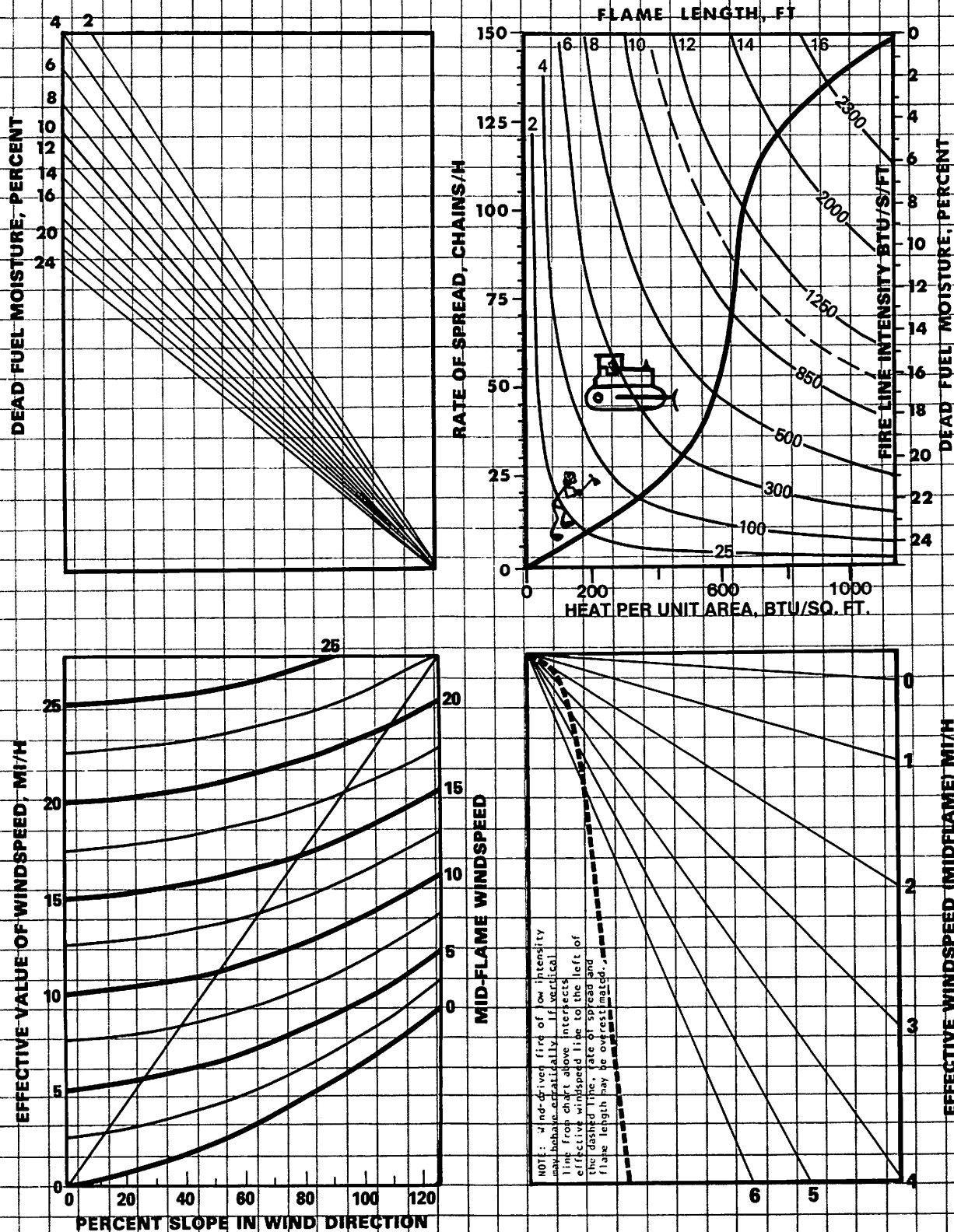


Fuel model 2 - high windspeeds

2. TIMBER (GRASS & UNDERSTORY) - HIGH WINDSPEEDS

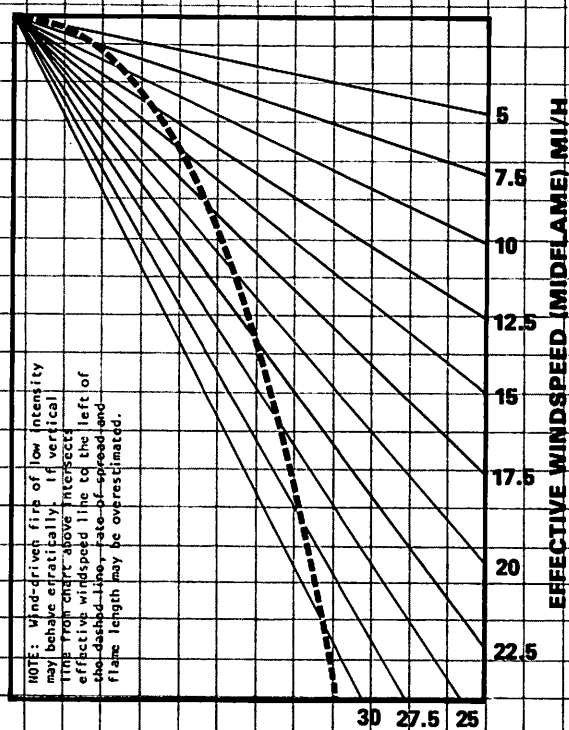
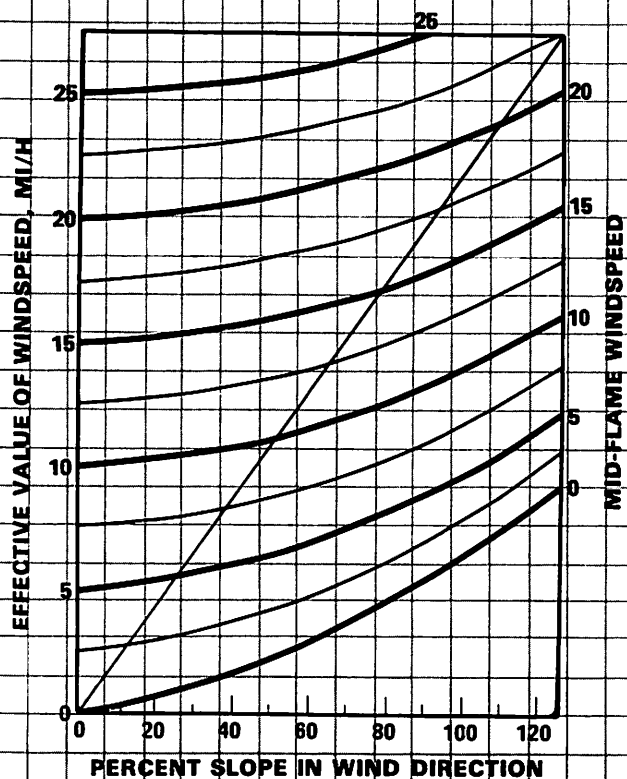
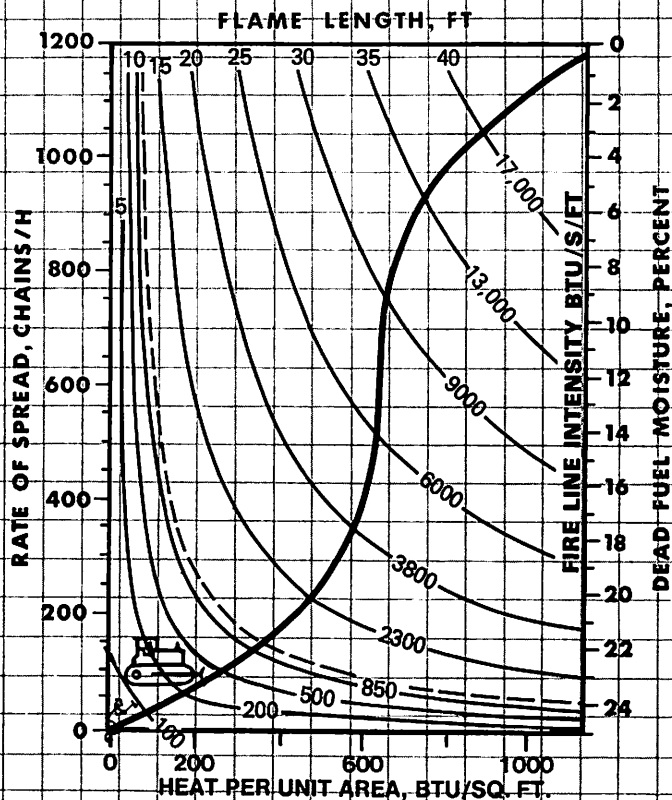
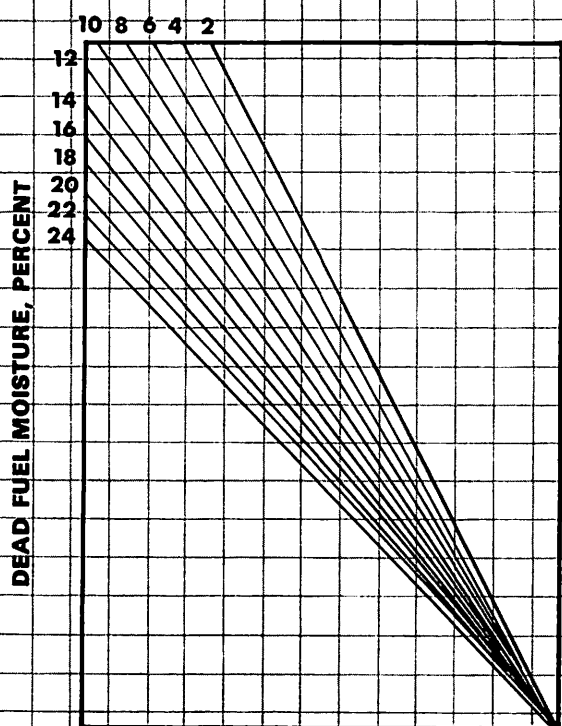


3. TALL GRASS (2.5 FT) - LOW WINDSPEEDS



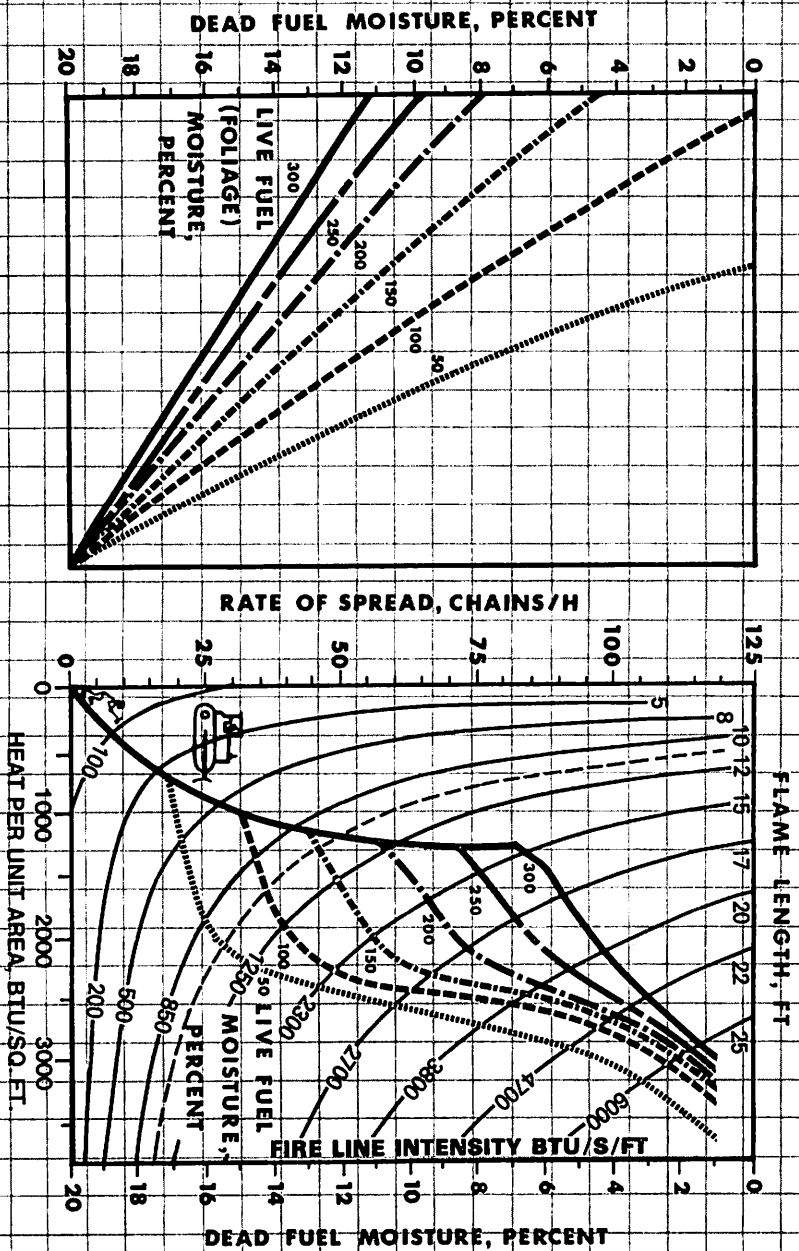
Fuel model 3 - high windspeeds

3. TALL GRASS (2.5 FT) - HIGH WINDSPEEDS



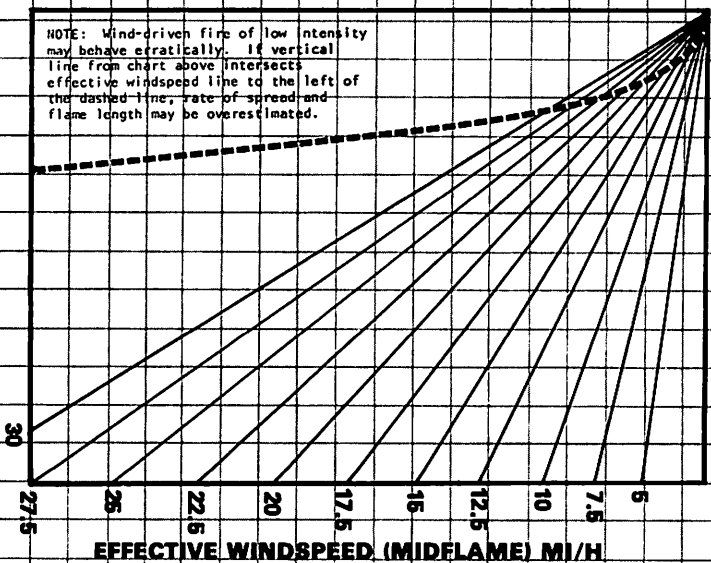
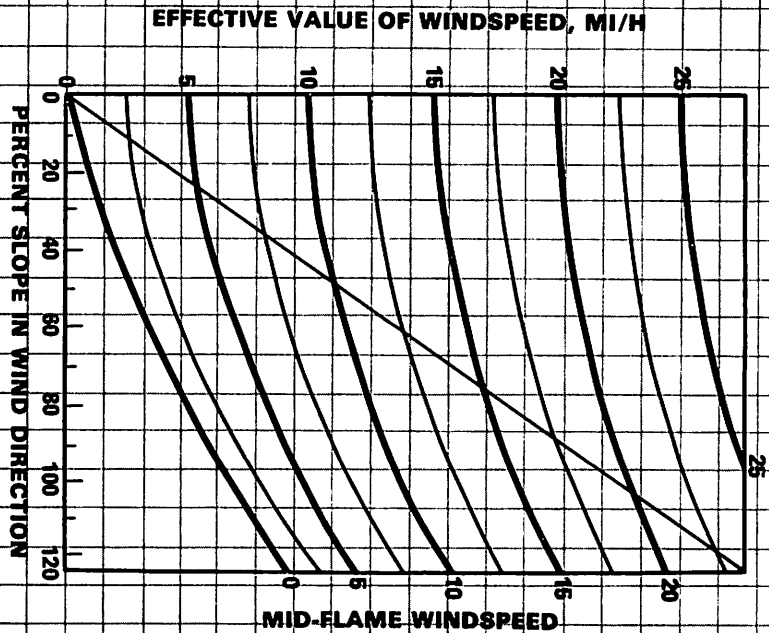
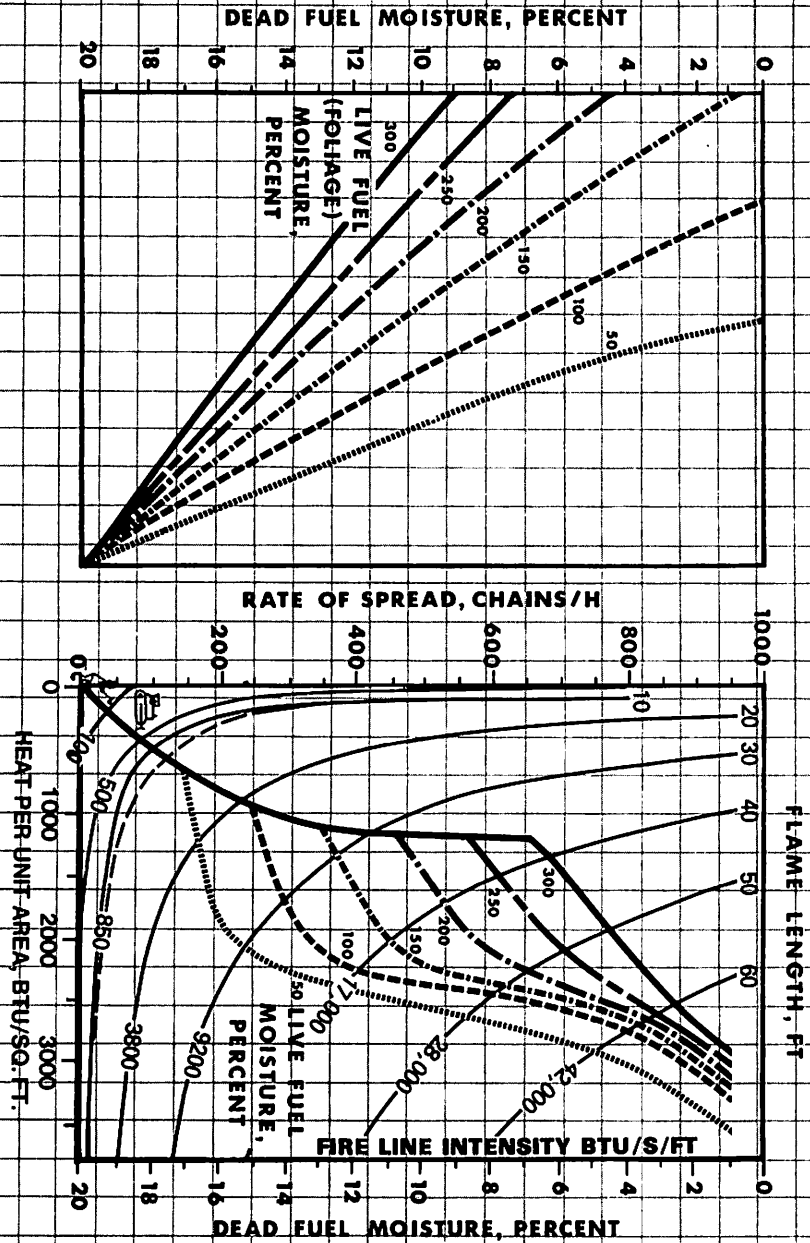
Fuel model 4 - low windspeeds

4. CHAPARRAL(6-FT) - LOW WINDSPEEDS



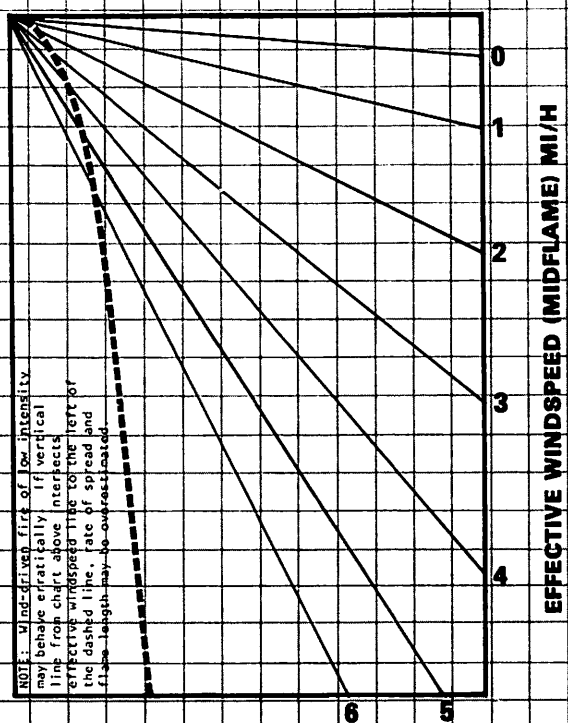
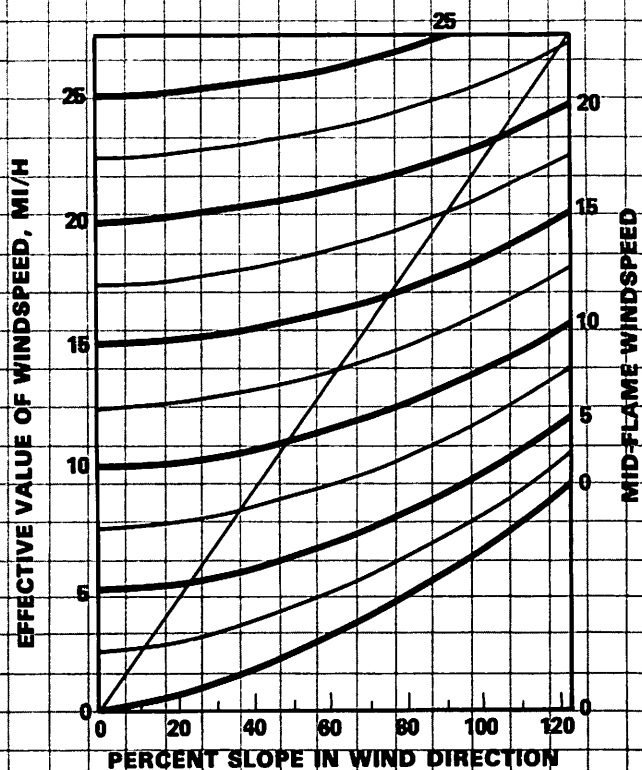
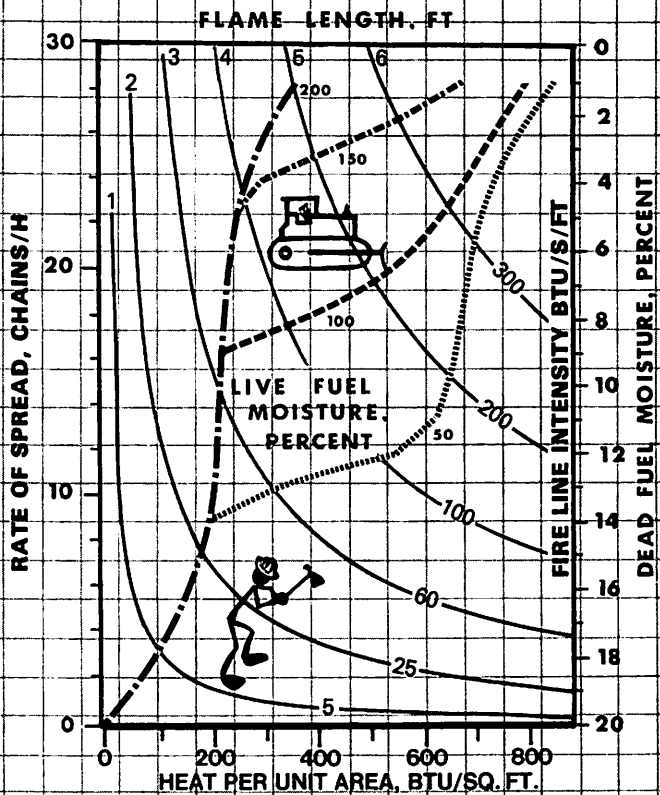
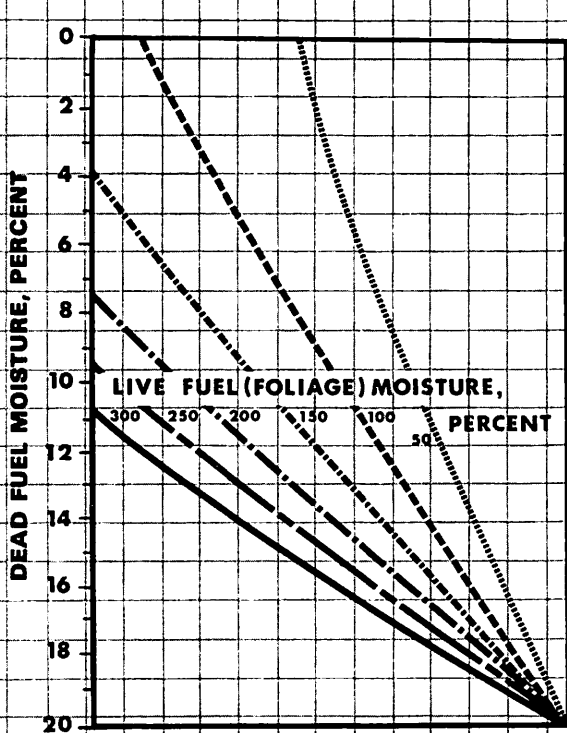
NOTE: Wind-driven fire of low intensity may behave erratically. If vertical line from chart above intersects effective windspeed line to the left of the dashed line, rate of spread and flame length may be overestimated.

4. CHAPARRAL (6 FT) - HIGH WINDSPEEDS



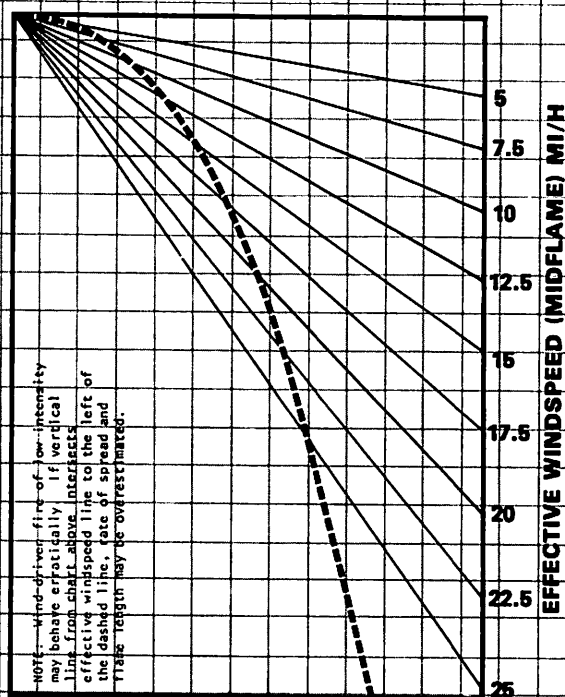
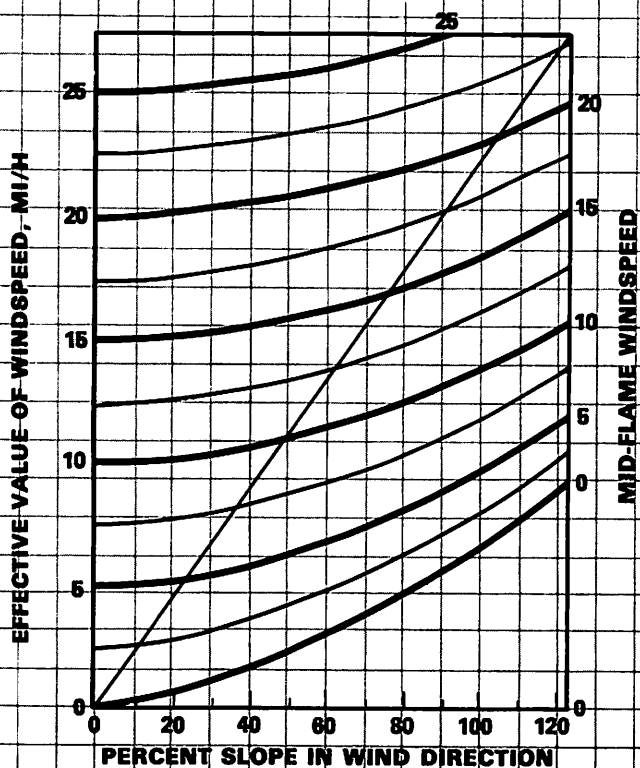
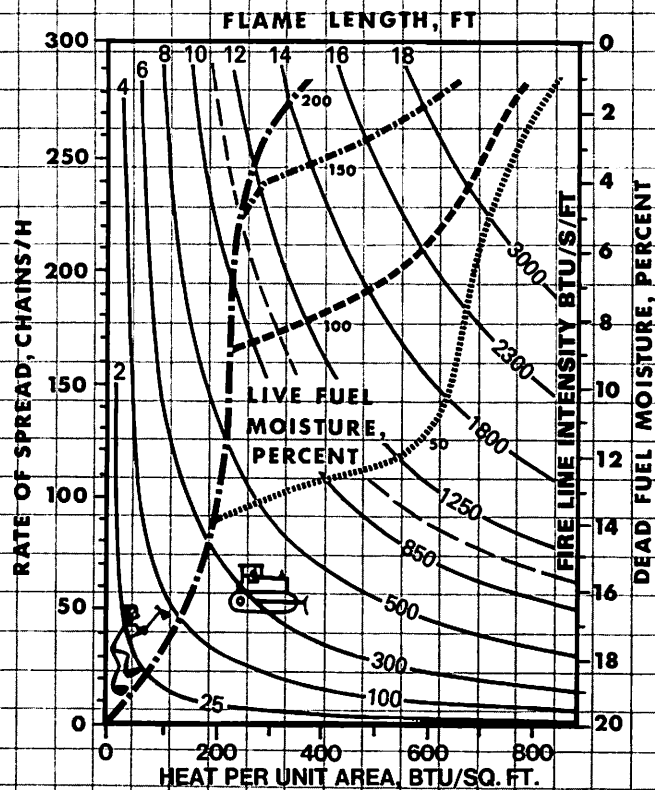
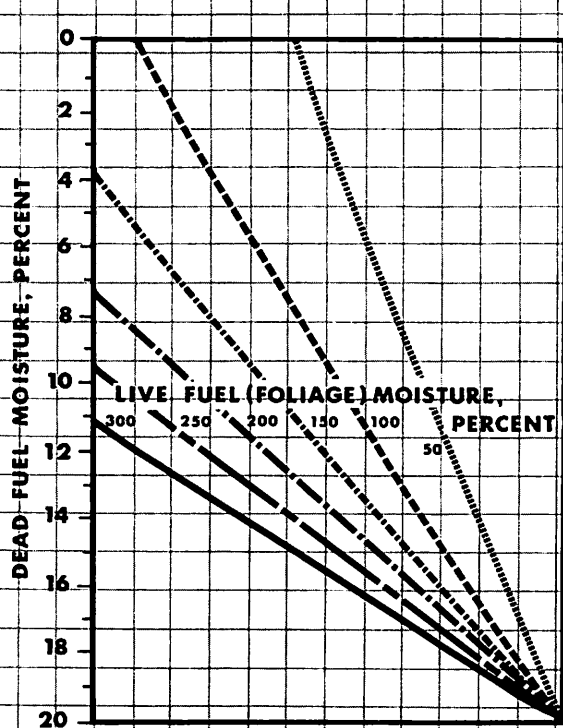
NOTE: Wind-driven fire of low intensity may behave erratically. If vertical line from chart above intersects effective windspeed line to the left of the dashed line, rate of spread and flame length may be overestimated.

5. BRUSH (2 FT) - LOW WINDSPEEDS



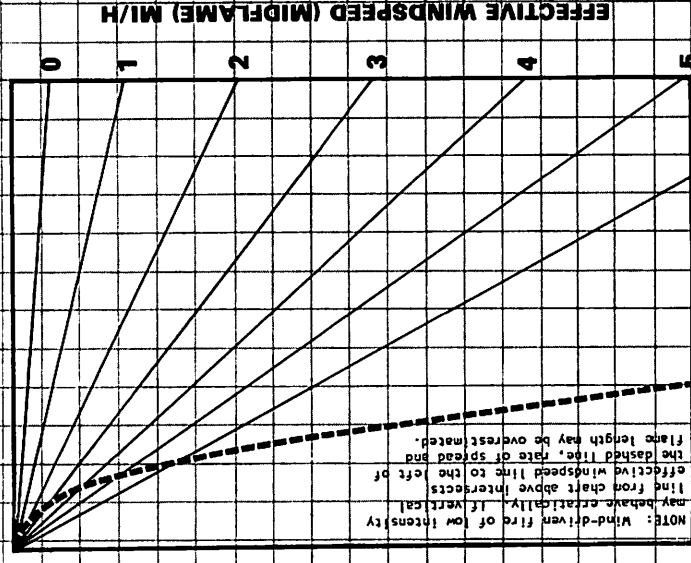
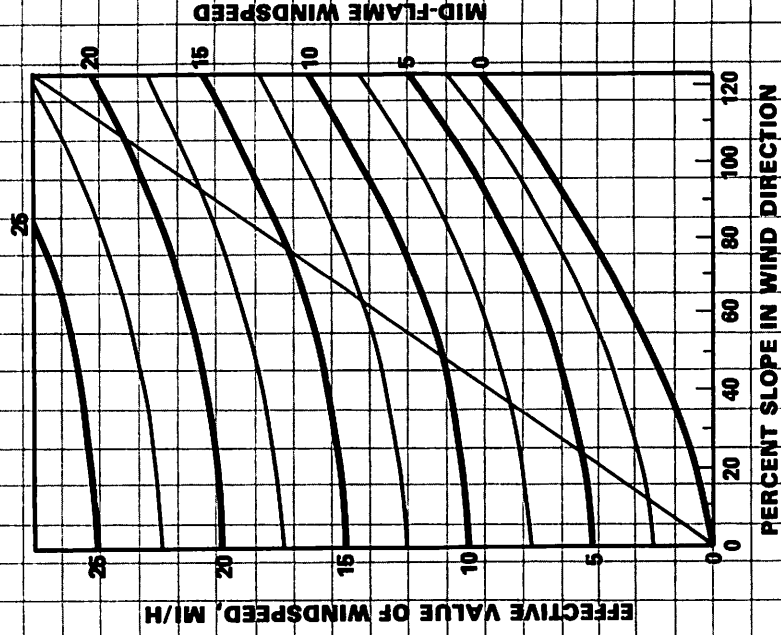
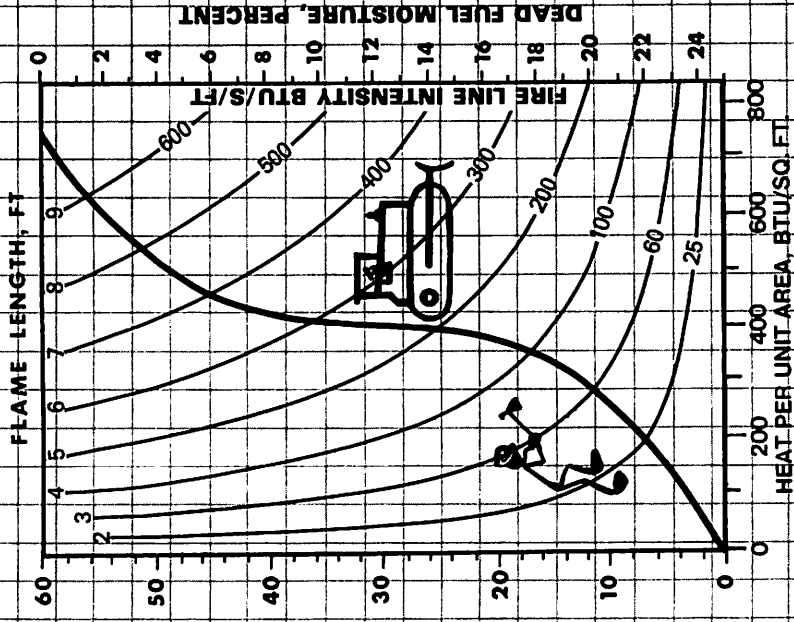
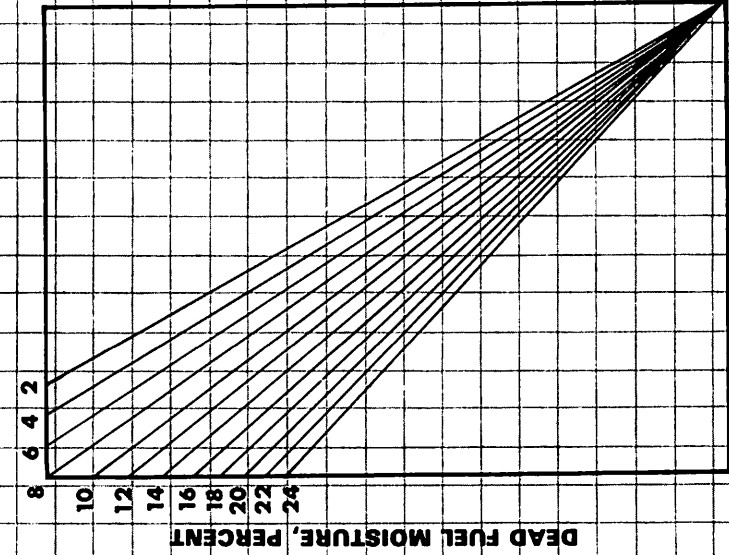
Fuel model 5 - high windspeeds

5. BRUSH (2 FT) - HIGH WINDSPEEDS



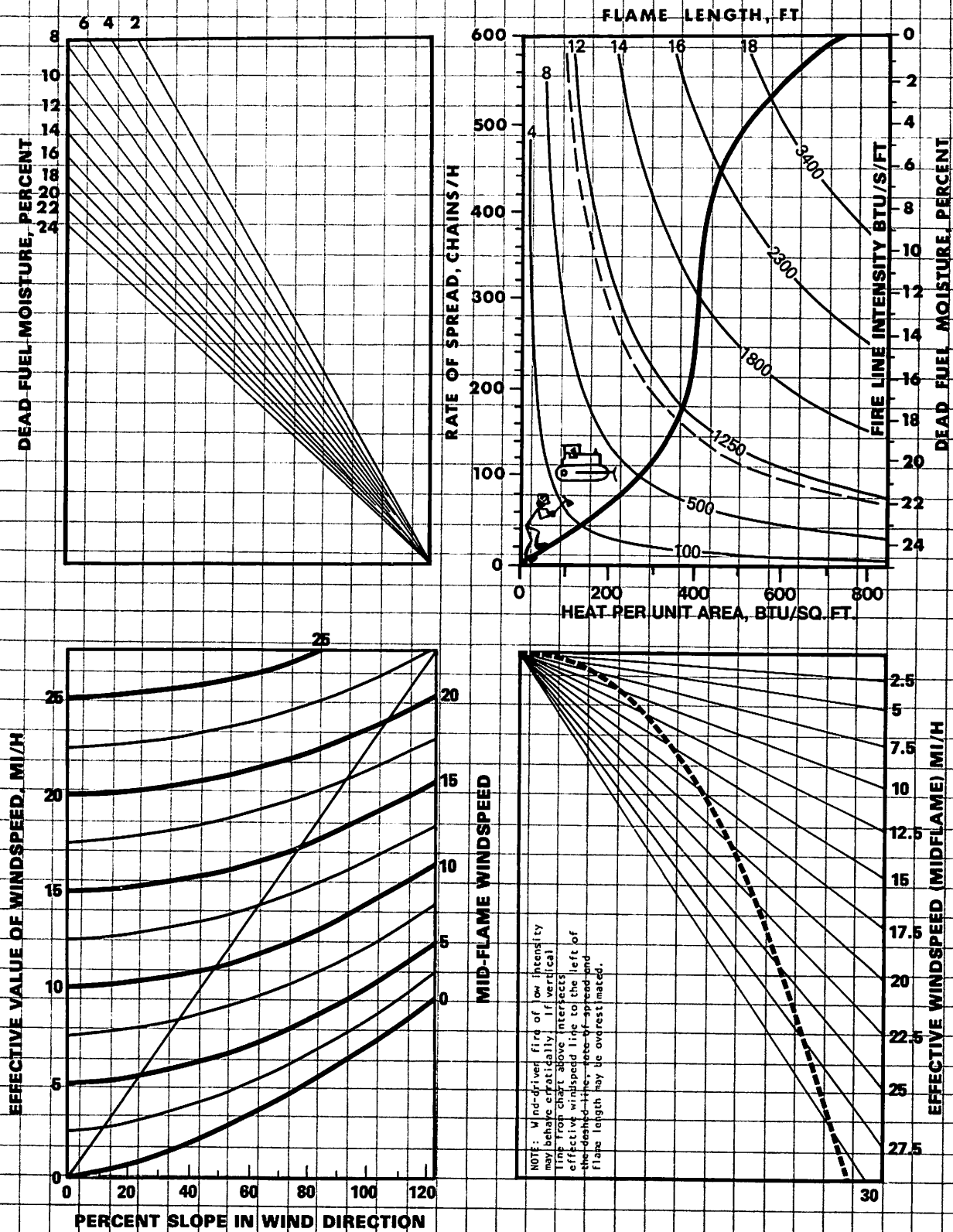
Fuel model 6 - low windspeeds

6. DORMANT BRUSH, HARDWOOD SLASH - LOW WINDSPEEDS



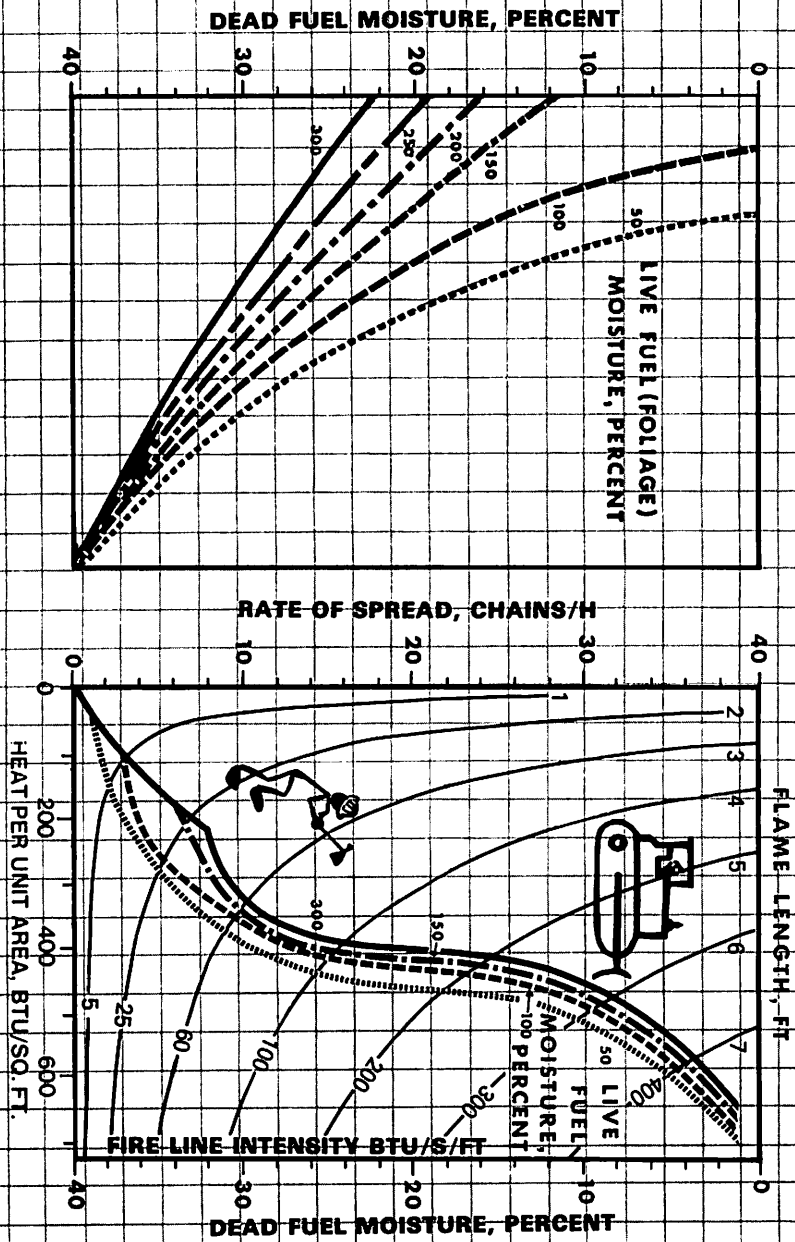
Fuel model 6 - high windspeeds

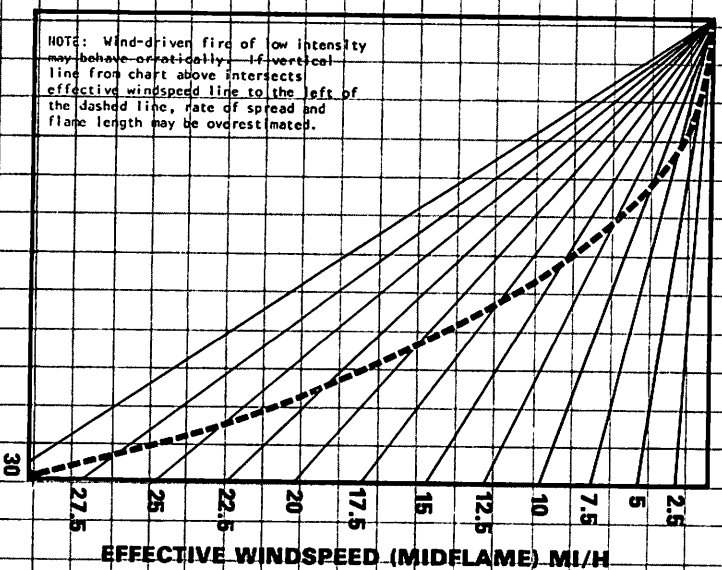
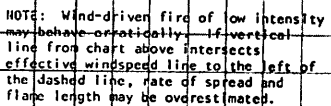
6. DORMANT BRUSH, HARDWOOD SLASH-HIGH WINDSPEEDS



Fuel model 7 - low windspeeds

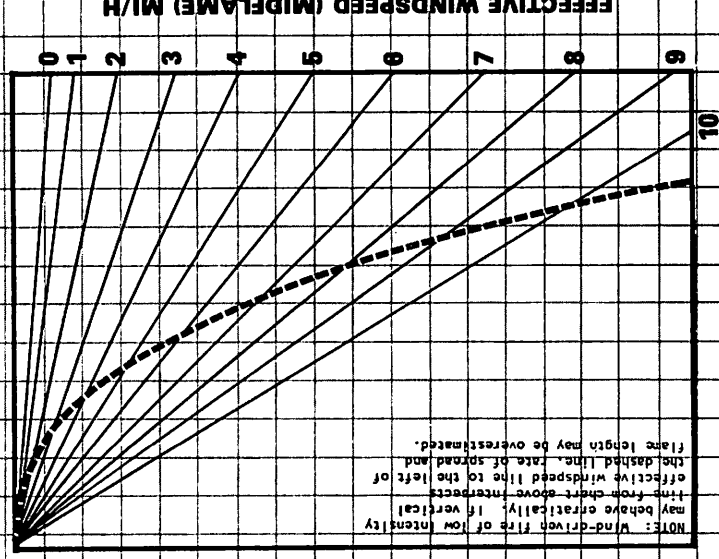
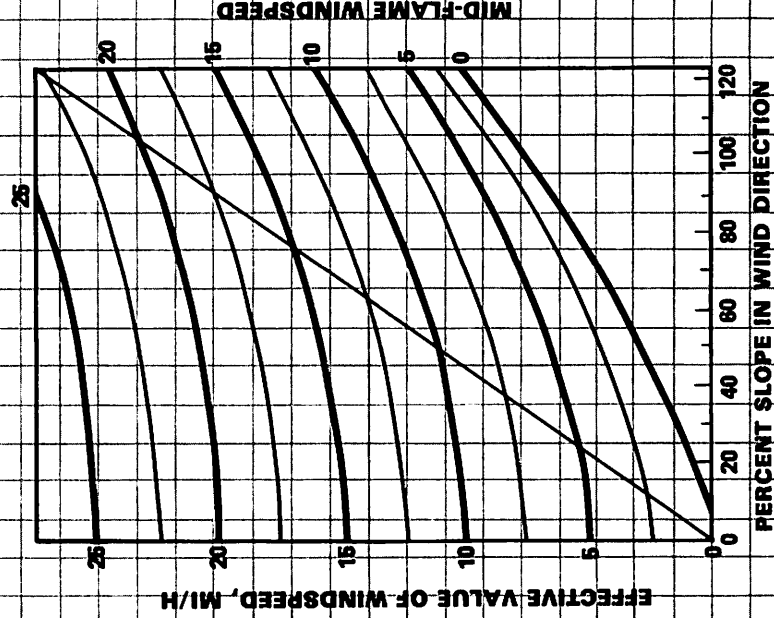
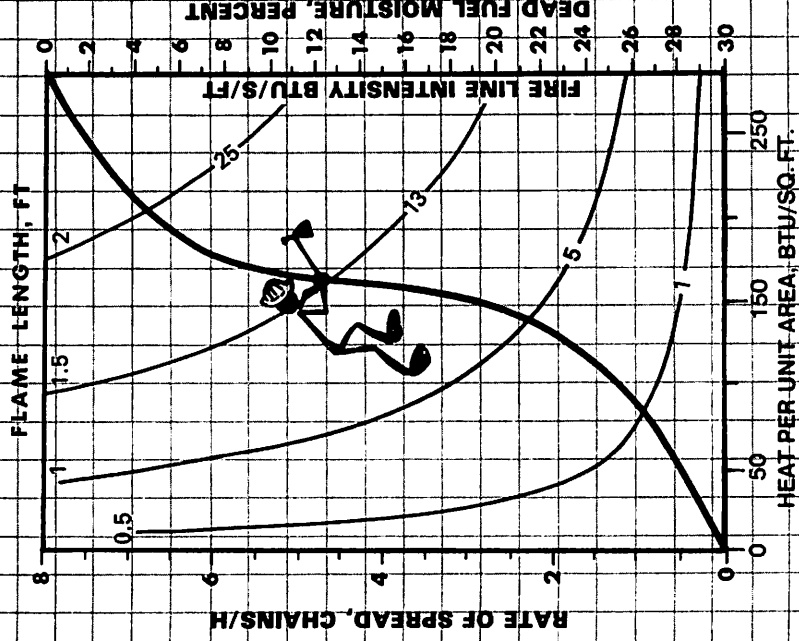
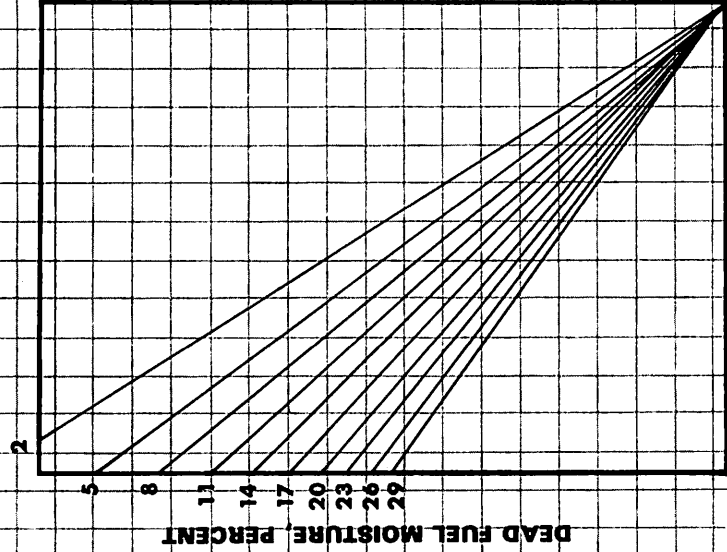
7. SOUTHERN ROUGH - LOW WINDSPEEDS





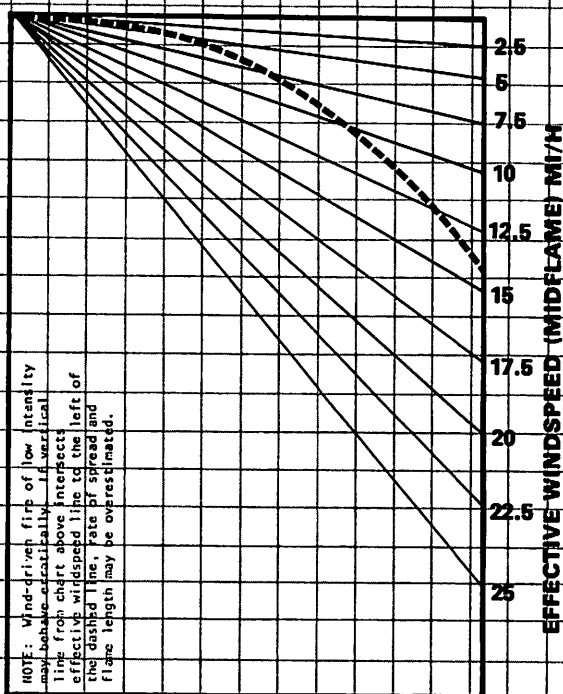
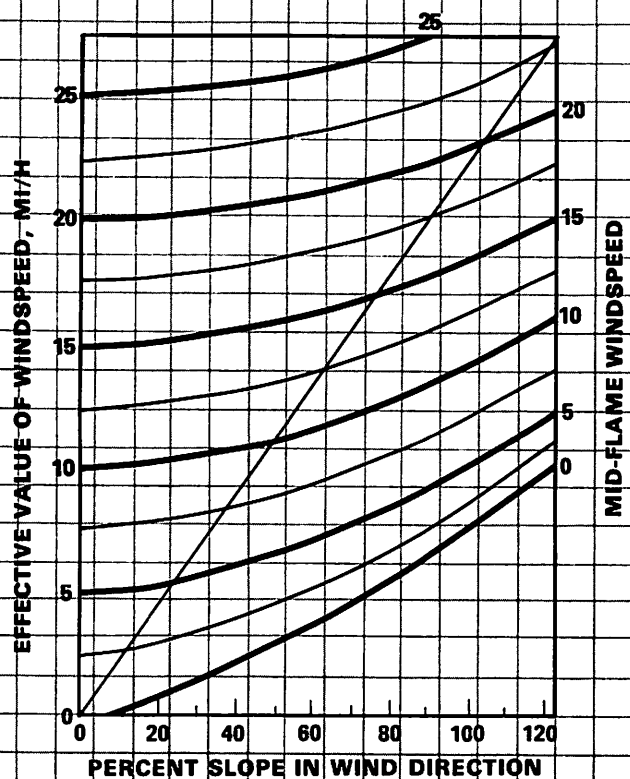
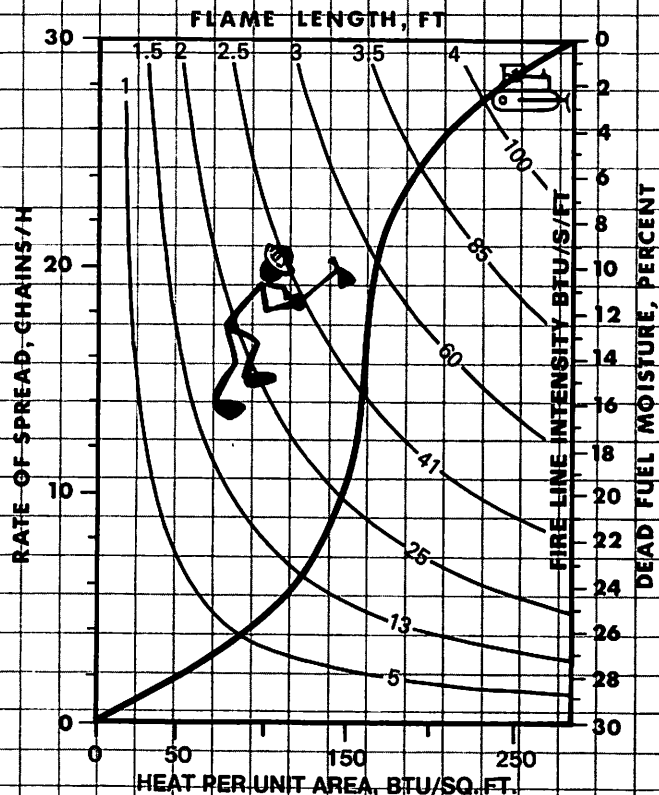
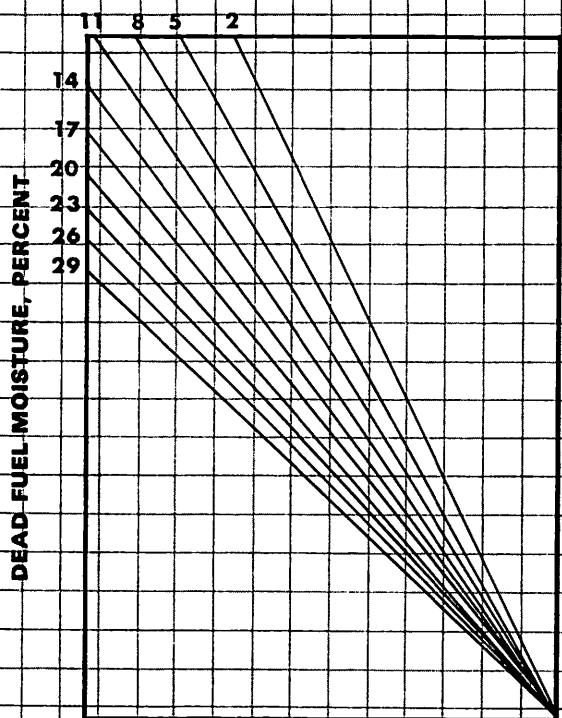
Fuel model 8 - low windspeeds

8. CLOSED TIMBER LITTER - LOW WINDSPEEDS



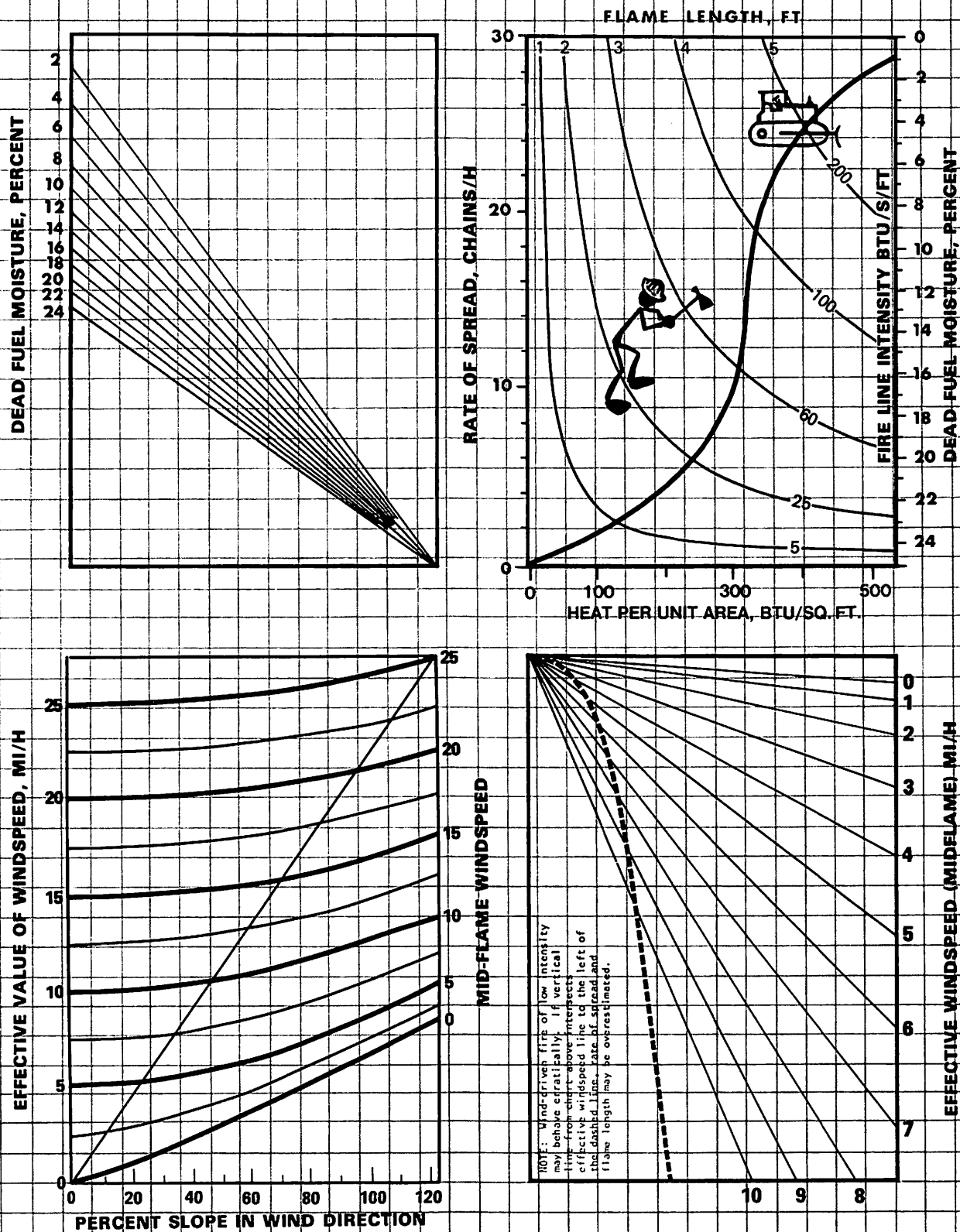
NOTE: Wind-driven fire of low intensity may behave erratically. If vertical line from chart above intersects effective windspeed line to the left of the dashed line, rate of spread and flame length may be overestimated.

8. CLOSED TIMBER LITTER - HIGH WINDSPEEDS

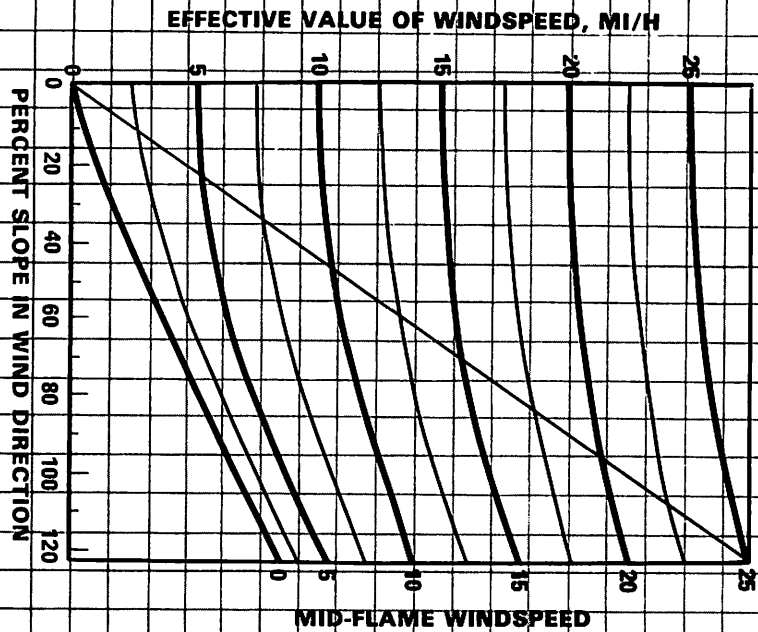
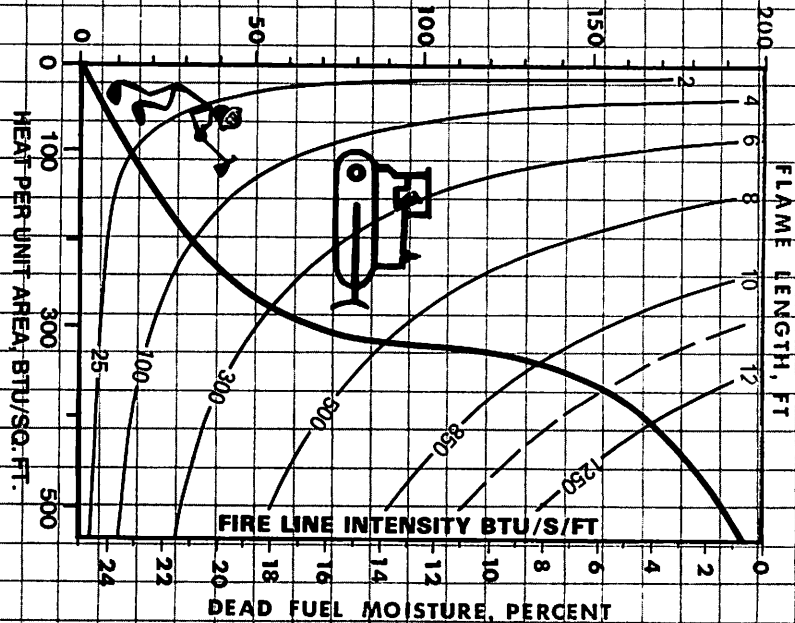
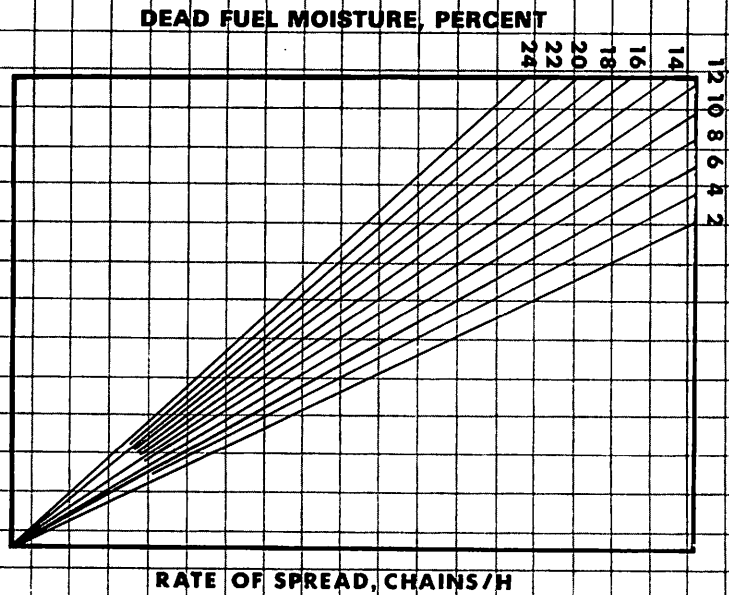


NOTE: Wind-driven fire of low intensity may behave erratically. If vertical line from chart above intersects effective windspeed line to the left of the dashed line, rate of spread and flame length may be overestimated.

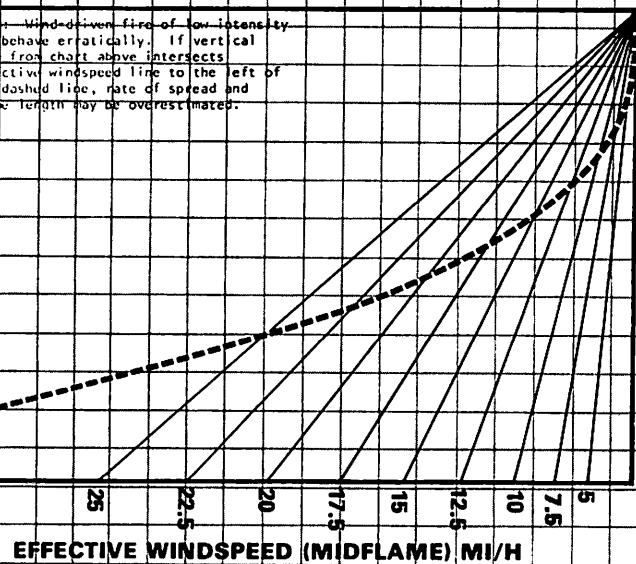
9. HARDWOOD LITTER - LOW WINDSPEEDS



9. HARDWOOD LITTER-HIGH WINDSPEEDS

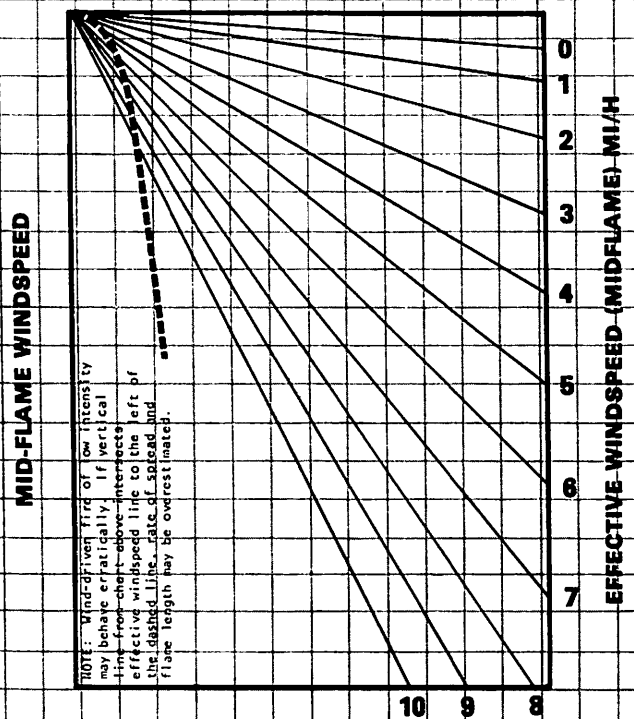
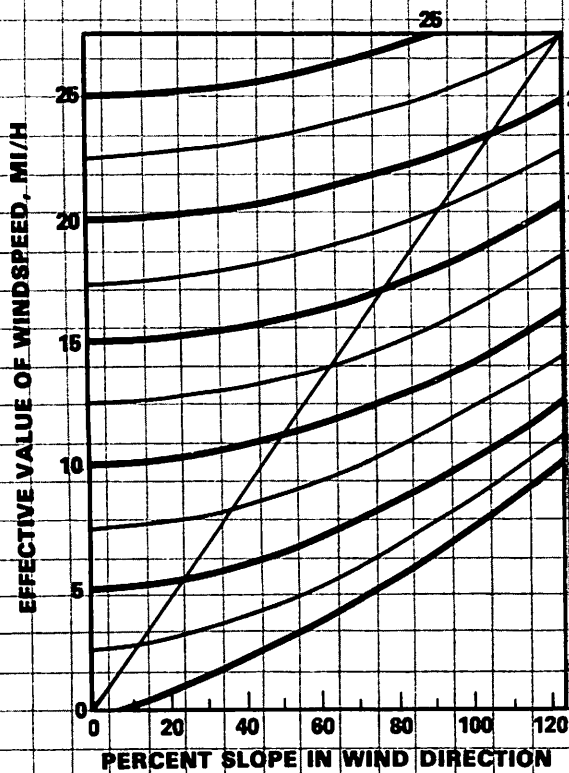
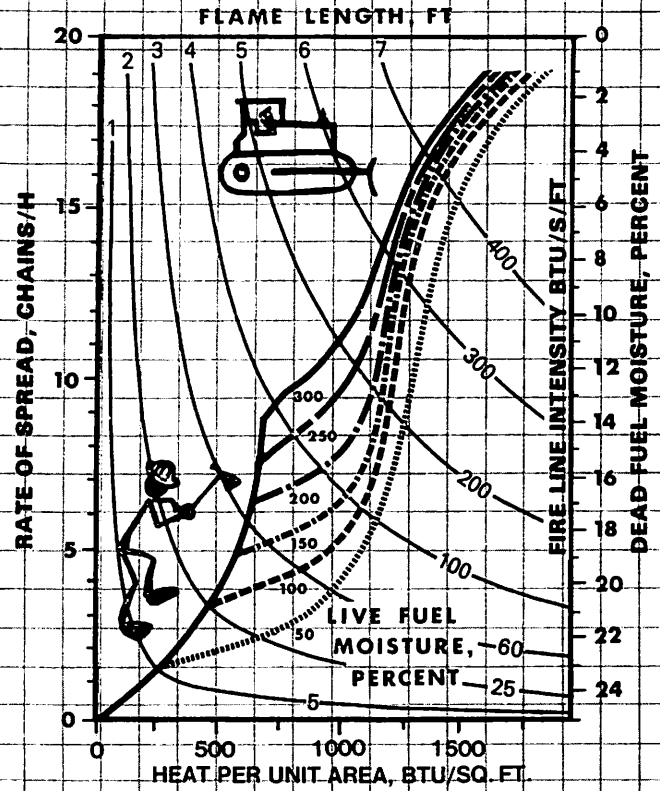
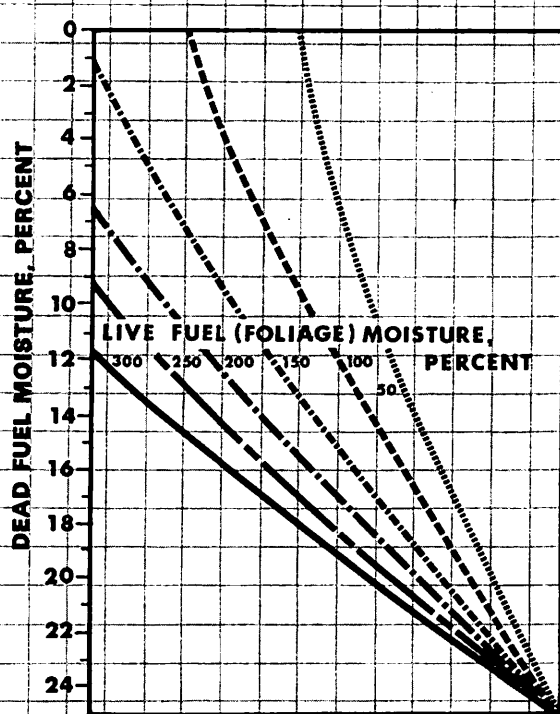


NOTE: Wind-driven fire of low intensity may behave erratically. If vertical line from chart above intersects effective windspeed line to the left of the dashed line, rate of spread and flame length may be overestimated.



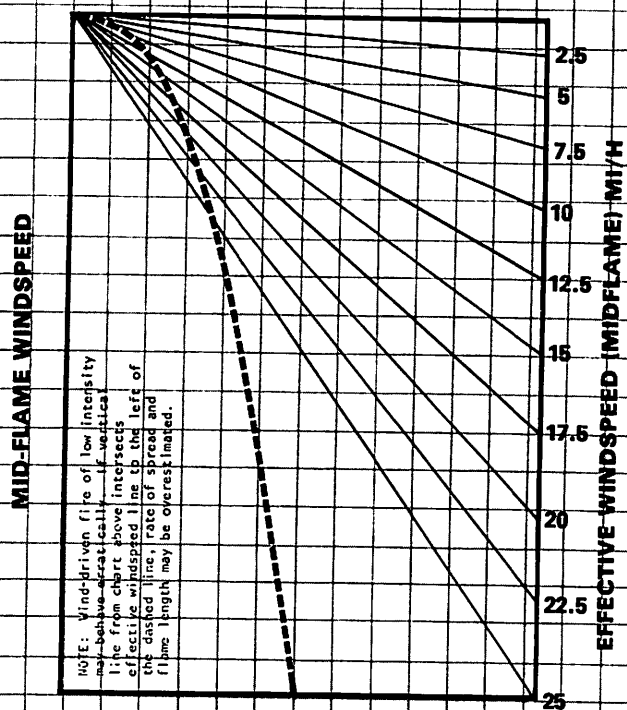
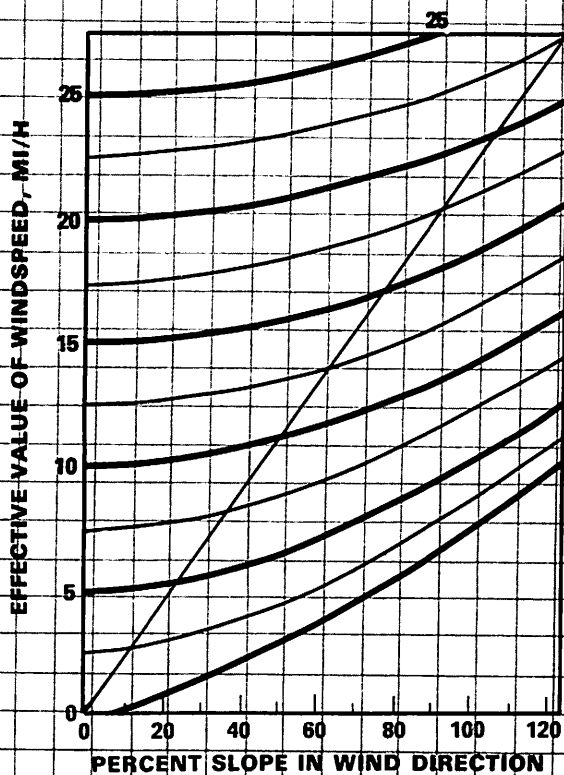
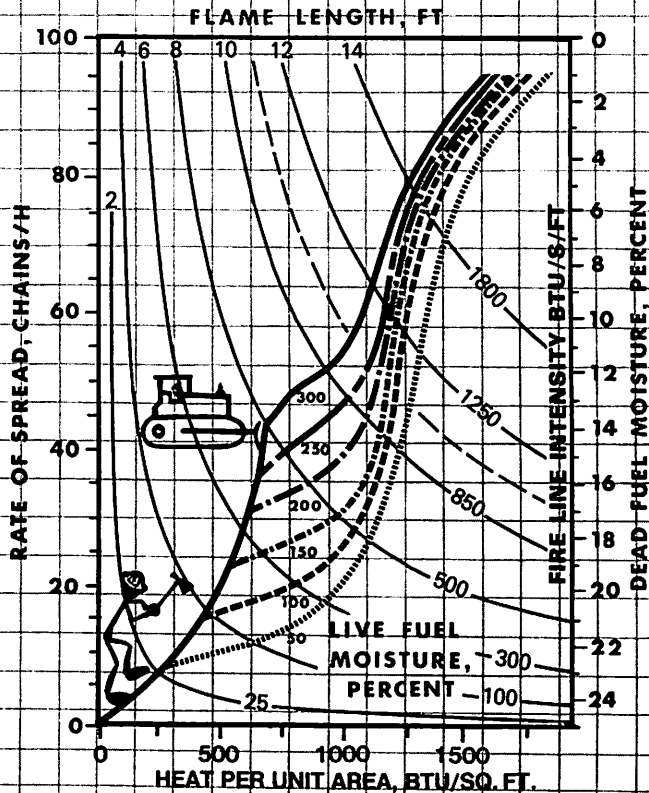
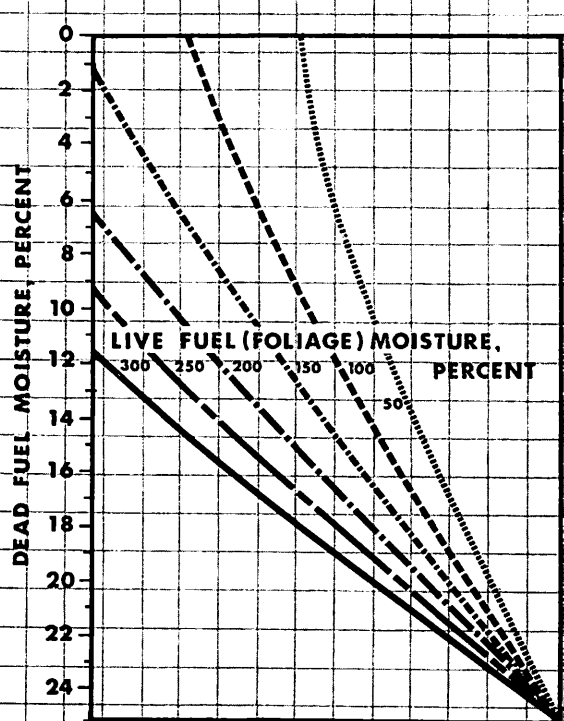
Fuel model 10 - low windspeeds

10. TIMBER (LITTER & UNDERSTORY) - LOW WINDSPEEDS

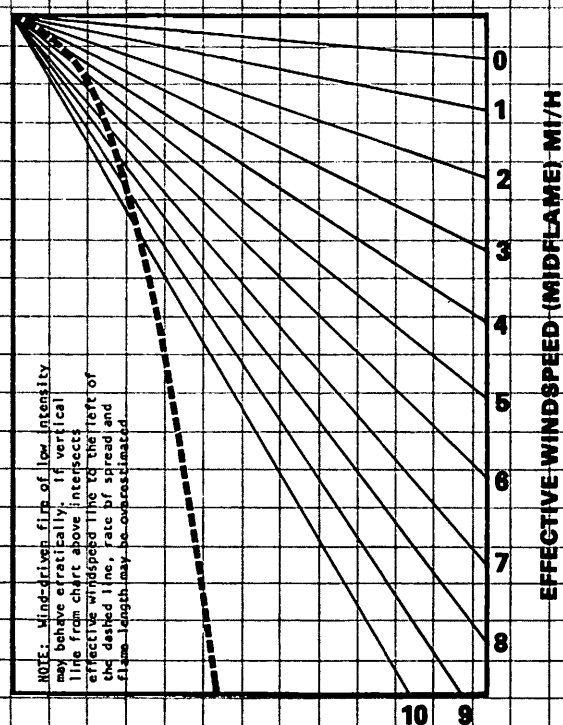
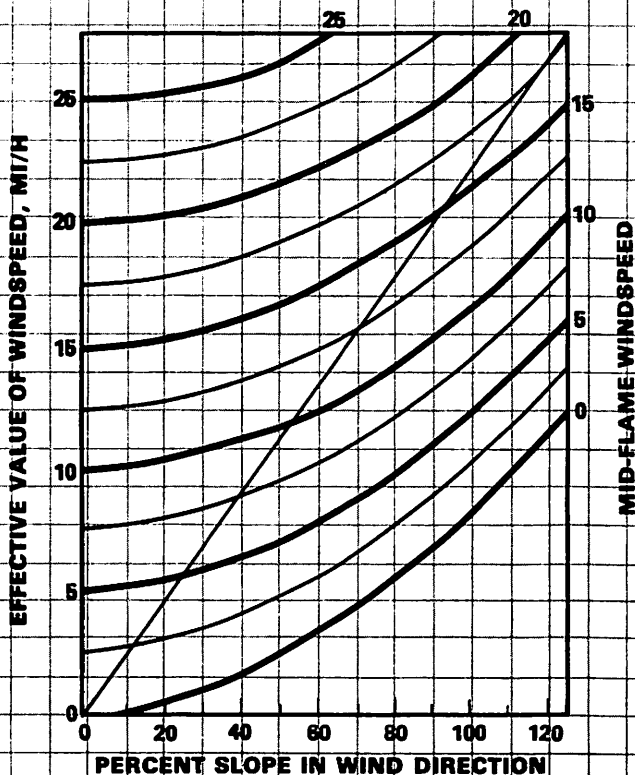
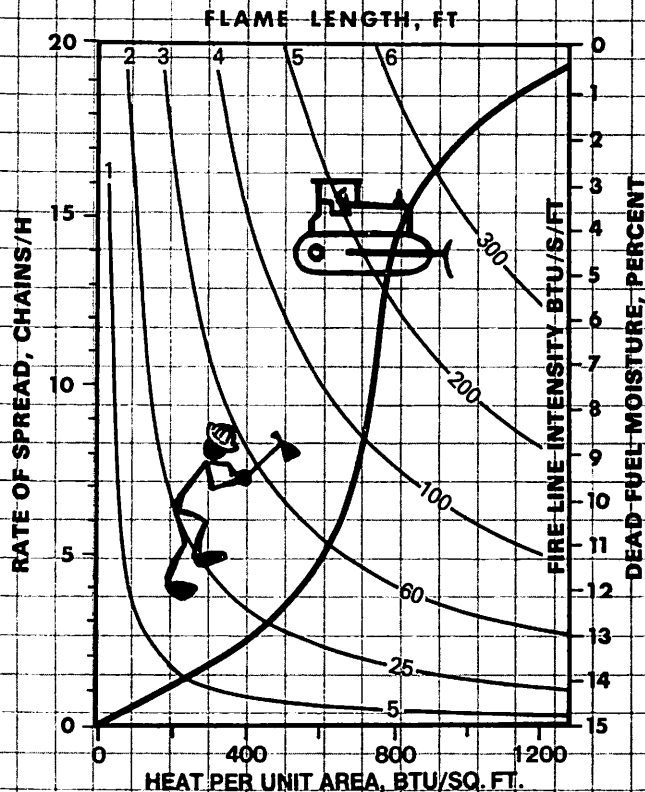
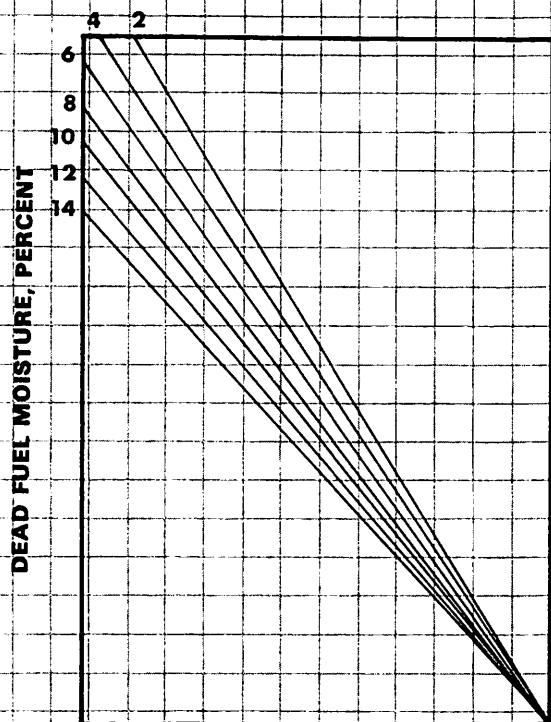


Fuel model 10 - high windspeeds

10. TIMBER (LITTER & UNDERSTORY)-HIGH WINDSPEEDS

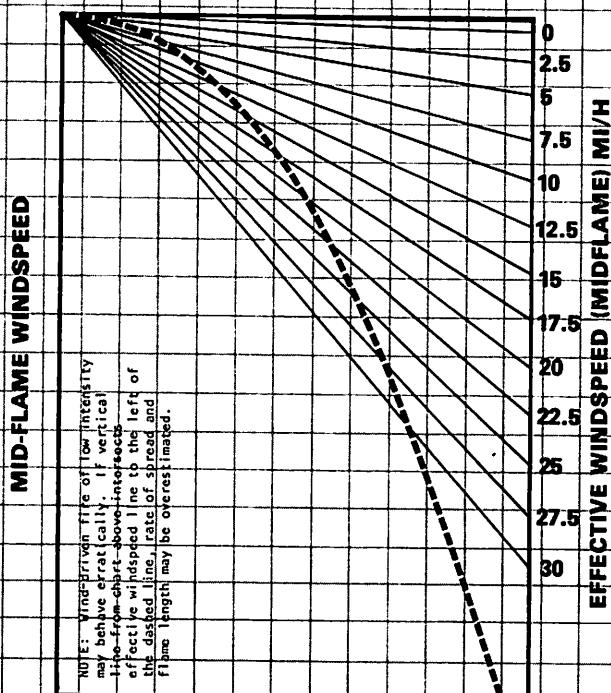
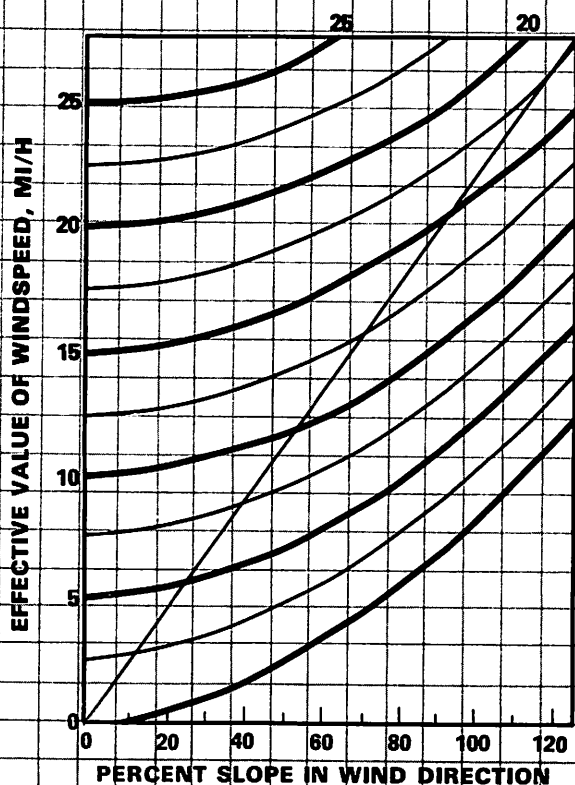
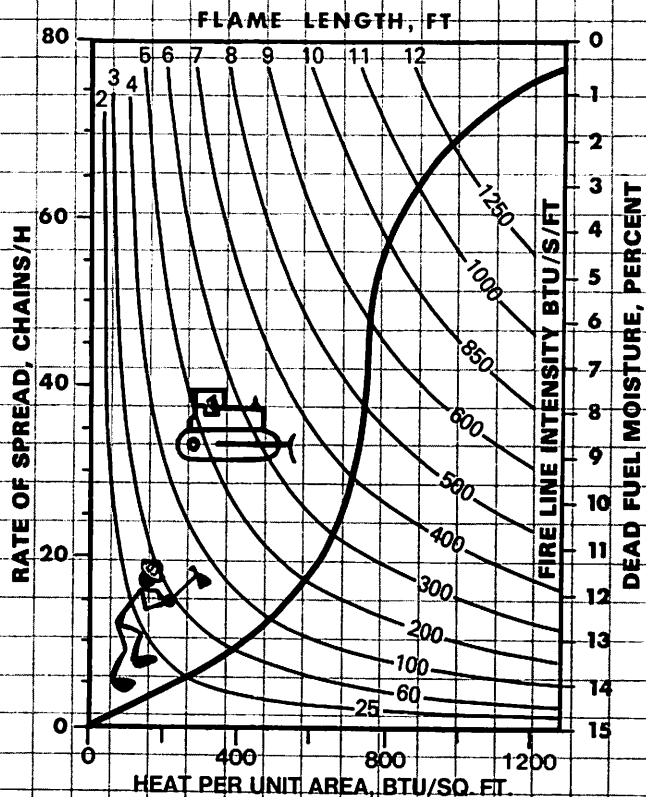
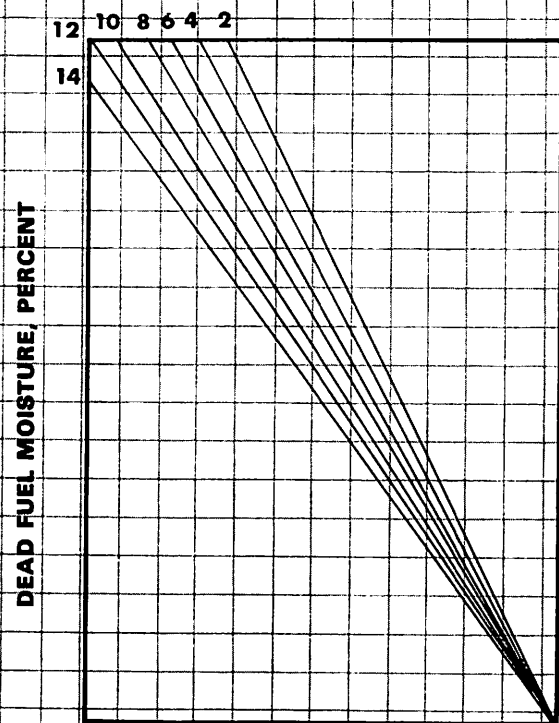


11. LIGHT LOGGING SLASH - LOW WINDSPEEDS



NOTE: Wind-driven fire of low intensity may behave erratically. If vertical line from chart above intersects effective windspeed line to the left of the dashed line, rate of spread and flame length may be overestimated.

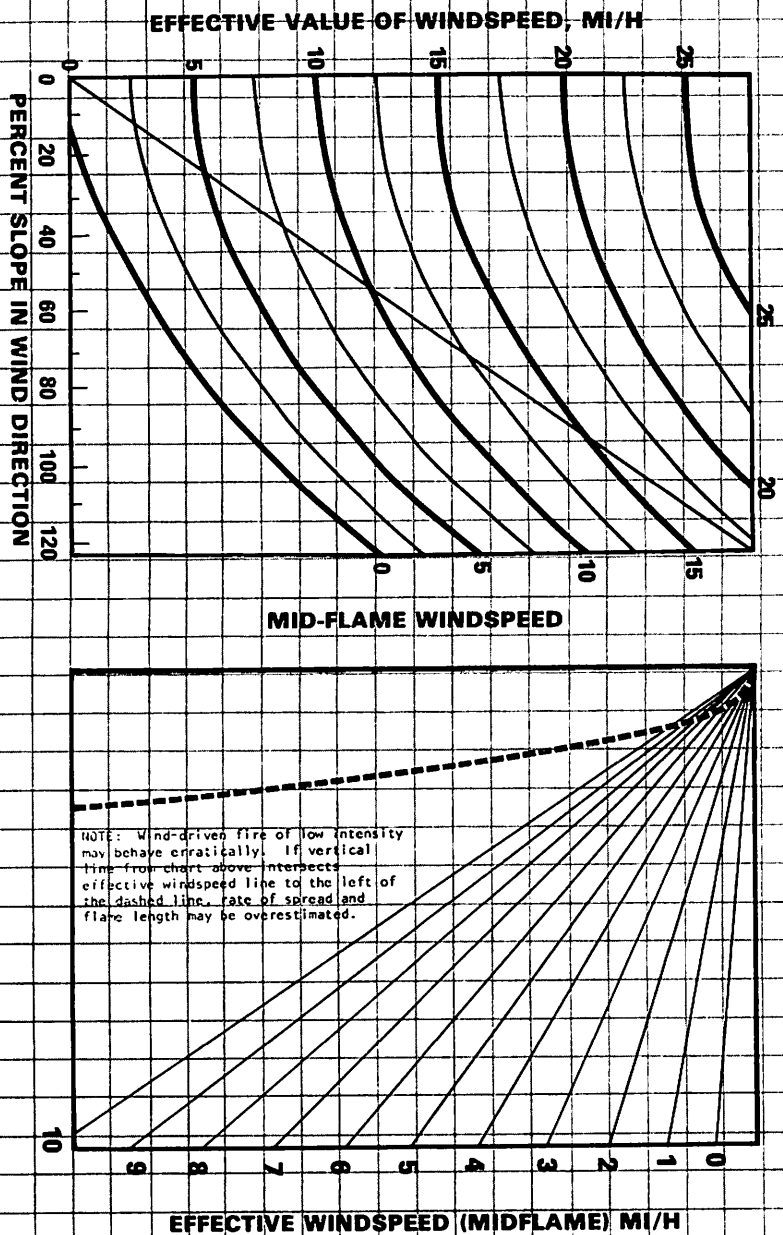
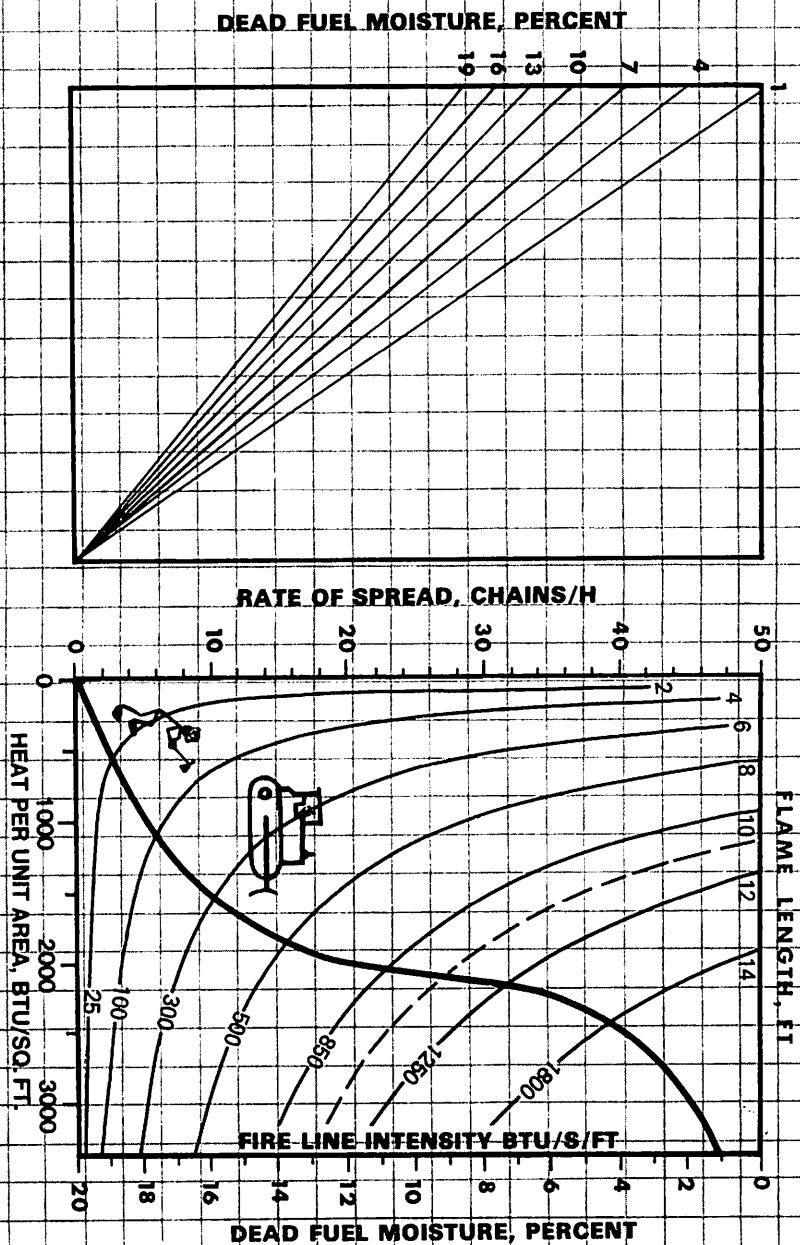
11. LIGHT LOGGING SLASH - HIGH WINDSPEEDS



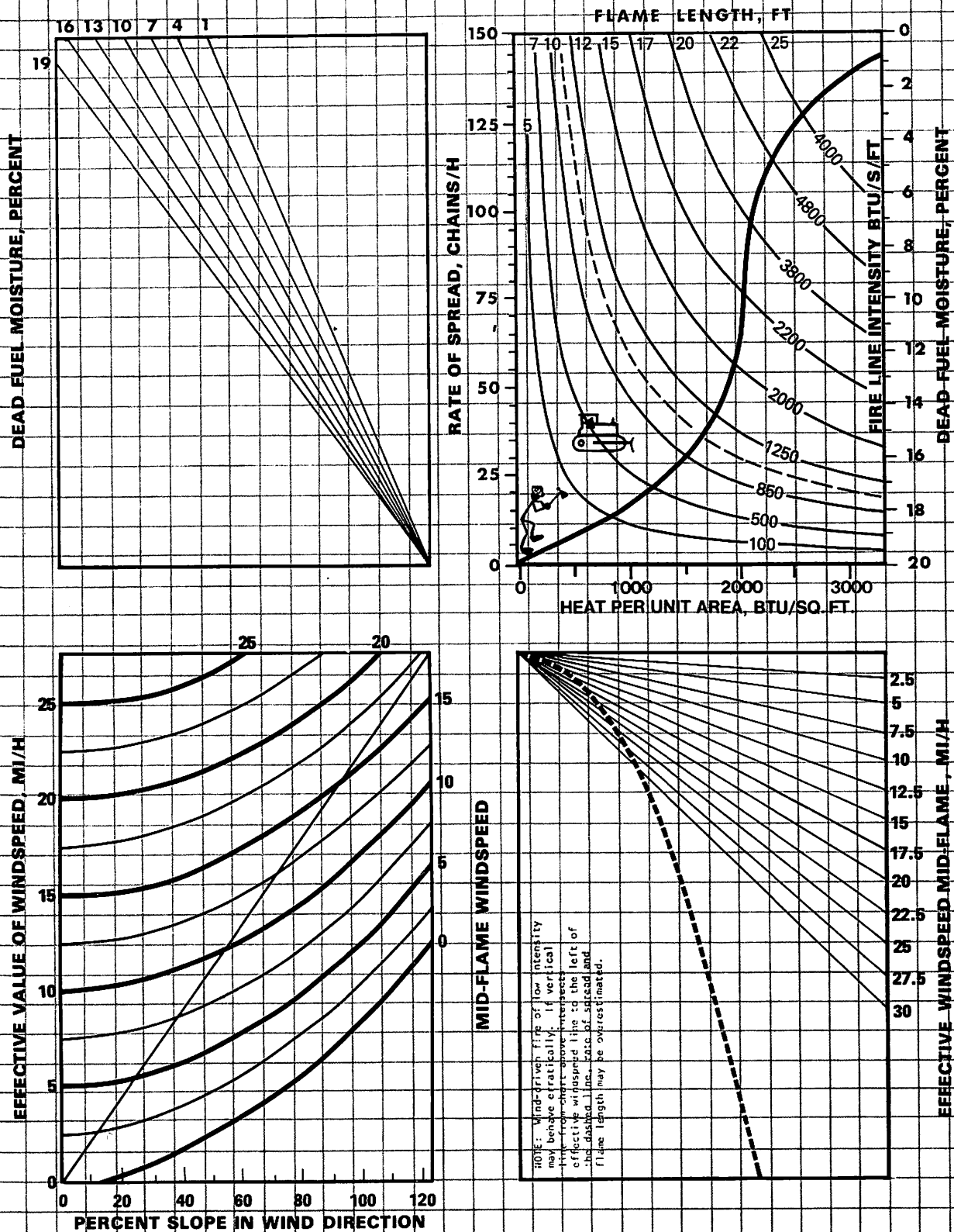
NOTE: Wind-driven fire of low intensity may behave erratically. If vertical line from chart above intersects effective windspeed line to the left of the dashed line, rate of spread and flame length may be overestimated.

Fuel model 12 - low windspeeds

12. MEDIUM LOGGING SLASH - LOW WINDSPEEDS

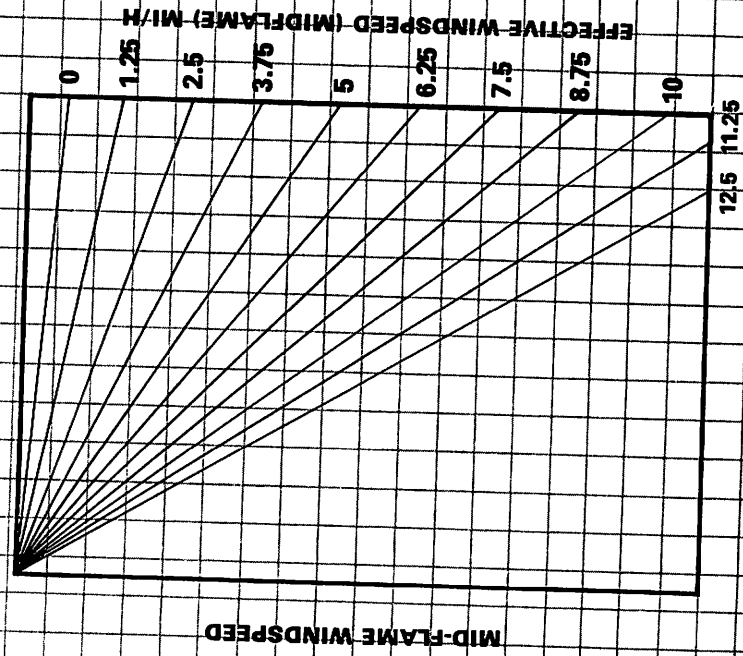
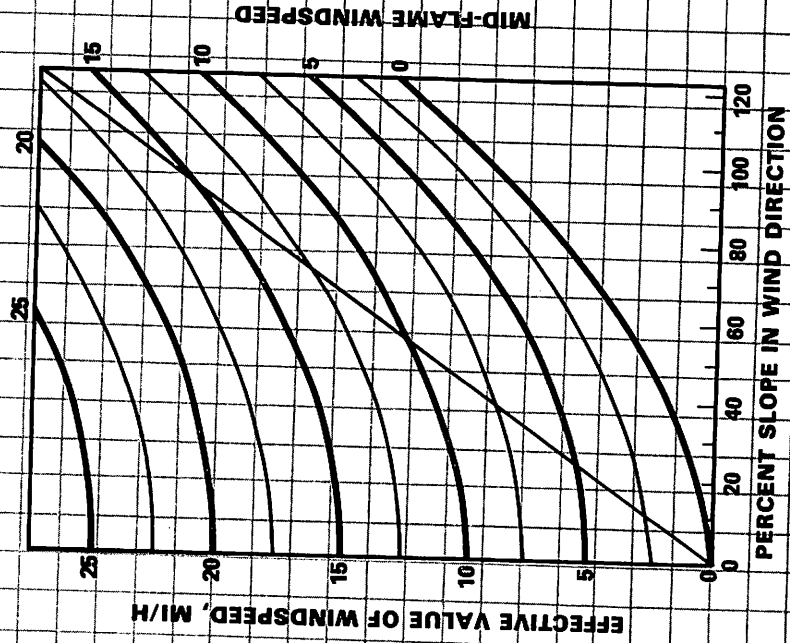
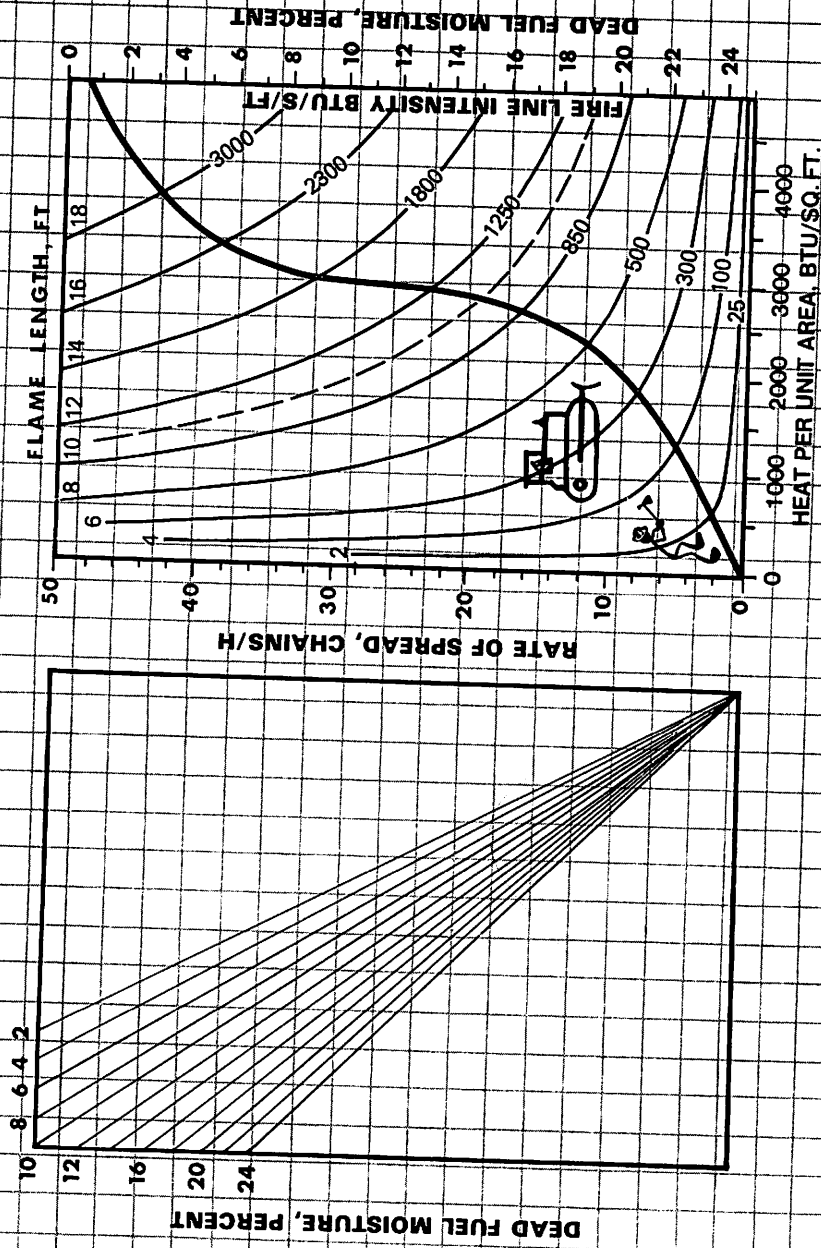


12. MEDIUM LOGGING SLASH-HIGH WINDSPEEDS



Fuel model 13 - low windspeeds

13. HEAVY LOGGING SLASH - LOW WINDSPEEDS



Fuel model 13 - high windspeeds

13. HEAVY LOGGING SLASH - HIGH WINDSPEEDS

