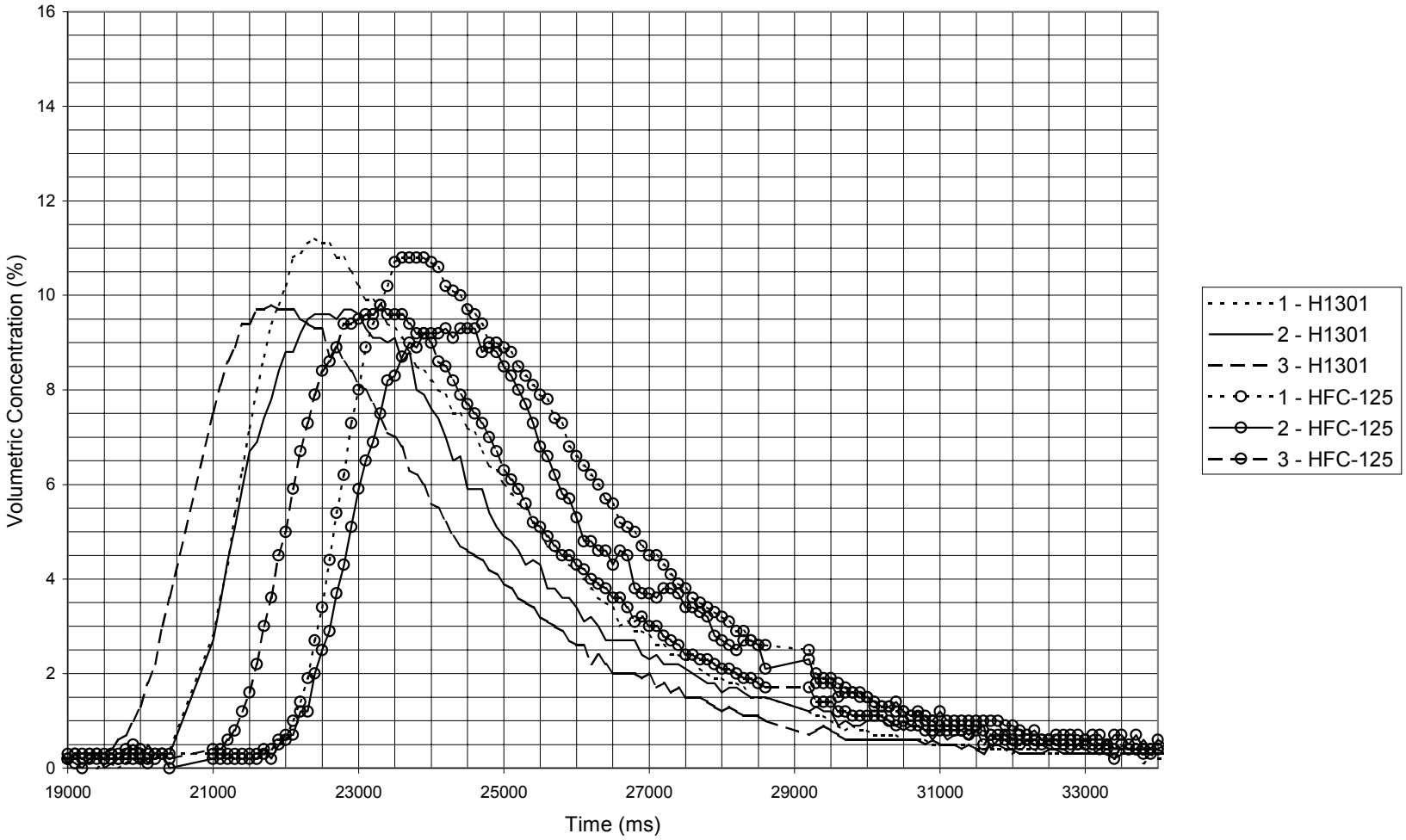

FIGURE 1. HFC-125 AND HALON 1301 COMPARISON, CHANNELS 1-3

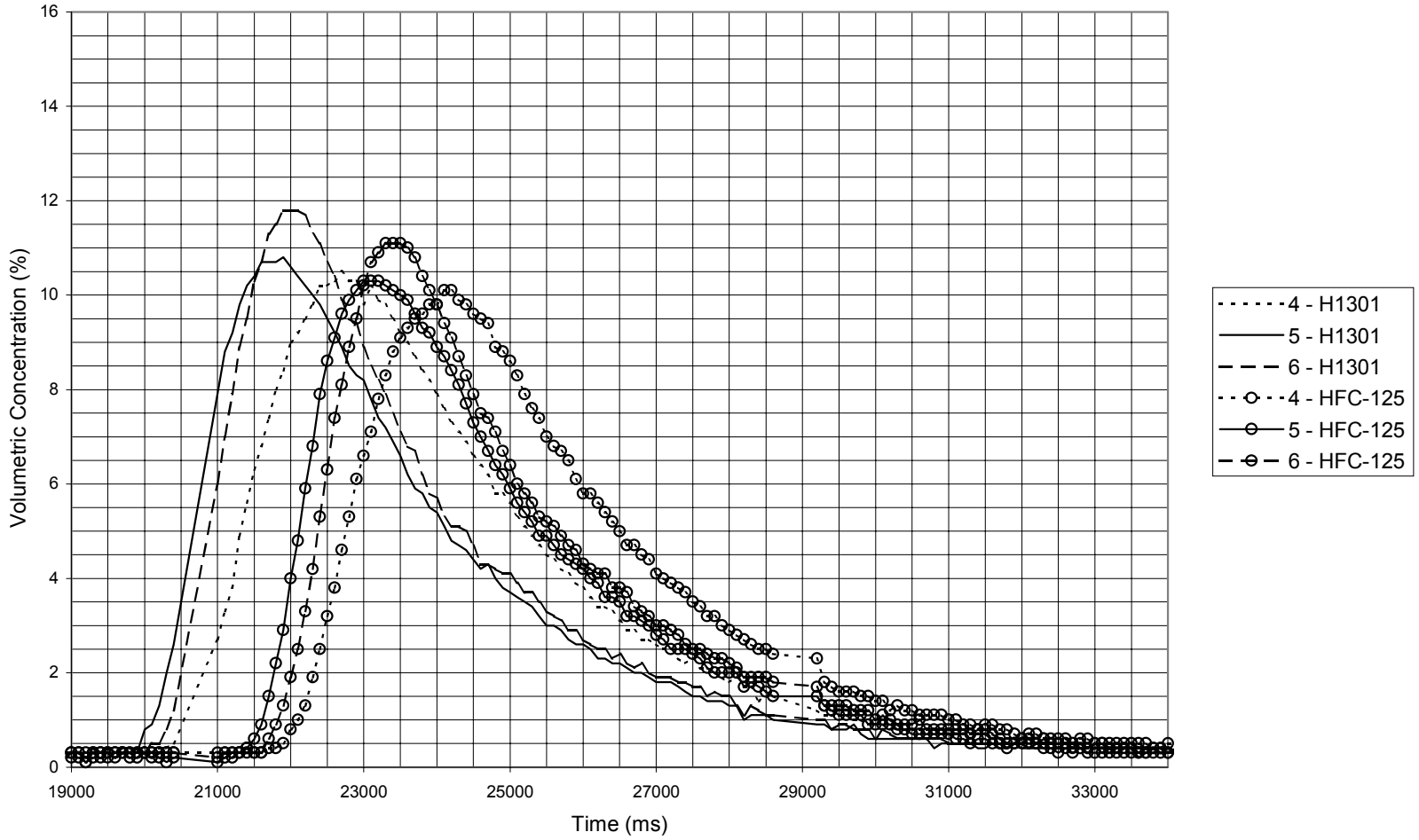

FIGURE 2. HFC-125 AND HALON 1301 COMPARISON, CHANNELS 4-6

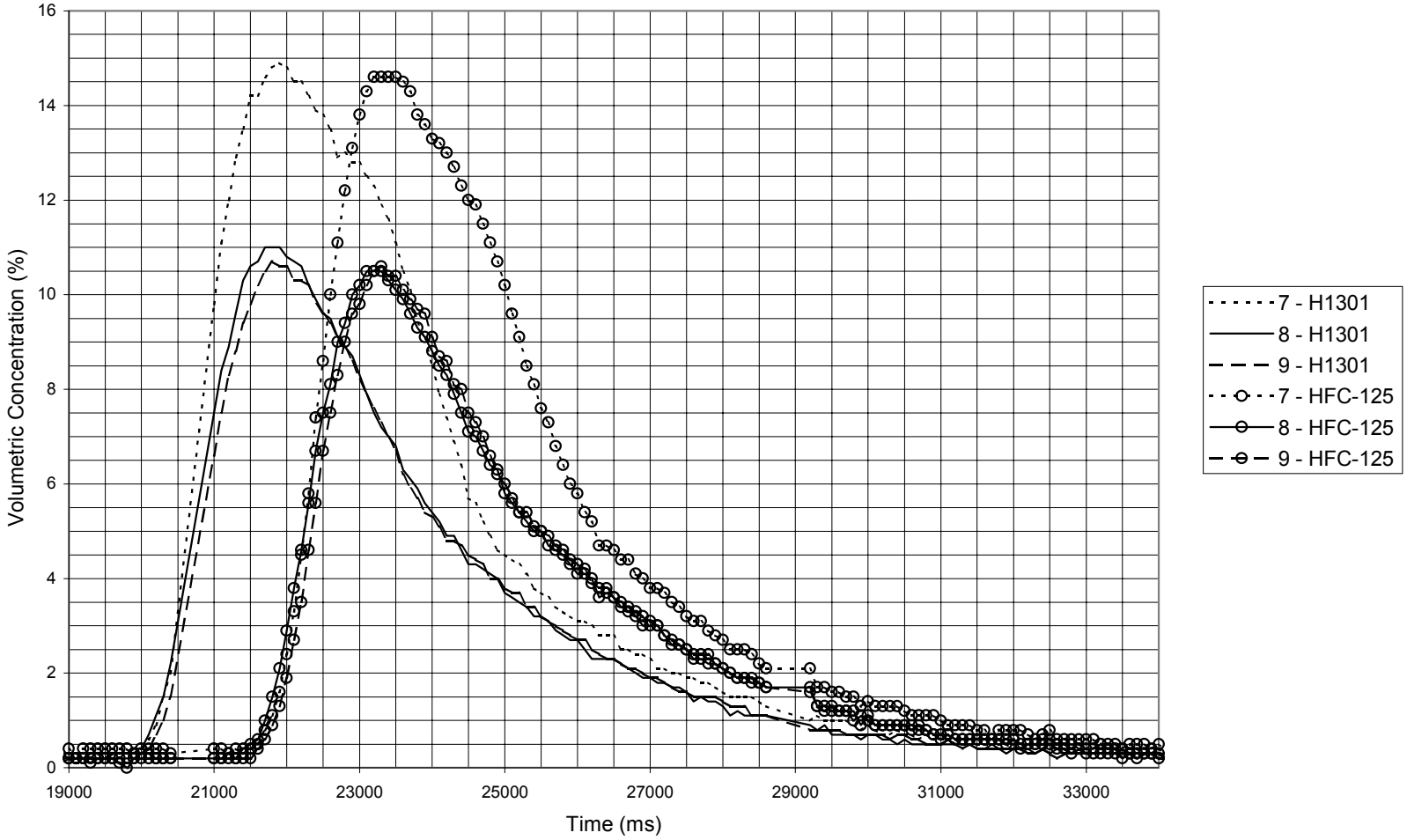

FIGURE 3. HFC-125 AND HALON 1301 COMPARISON, CHANNELS 7-9

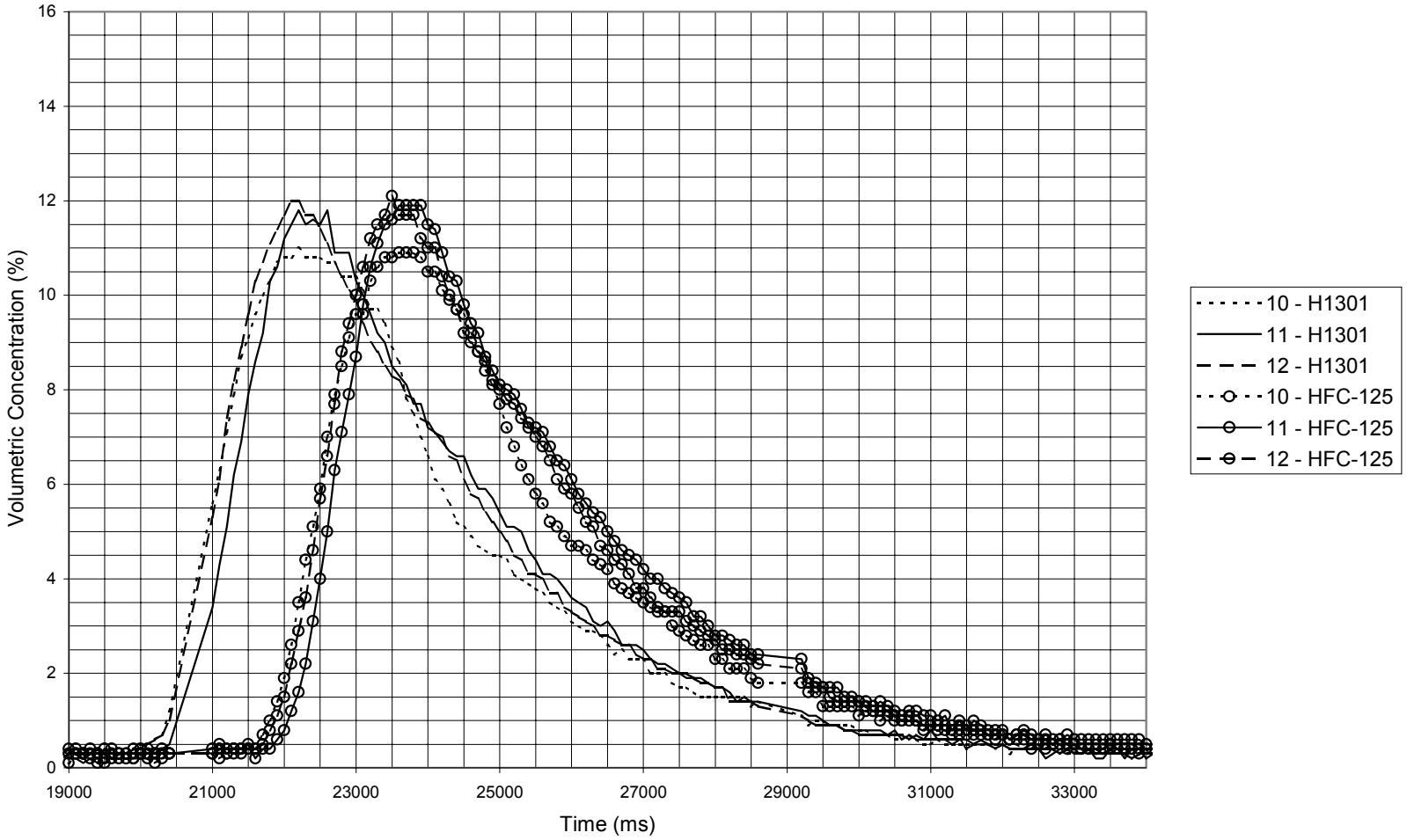

FIGURE 4. HFC-125 AND HALON 1301 COMPARISON, CHANNELS 10-12

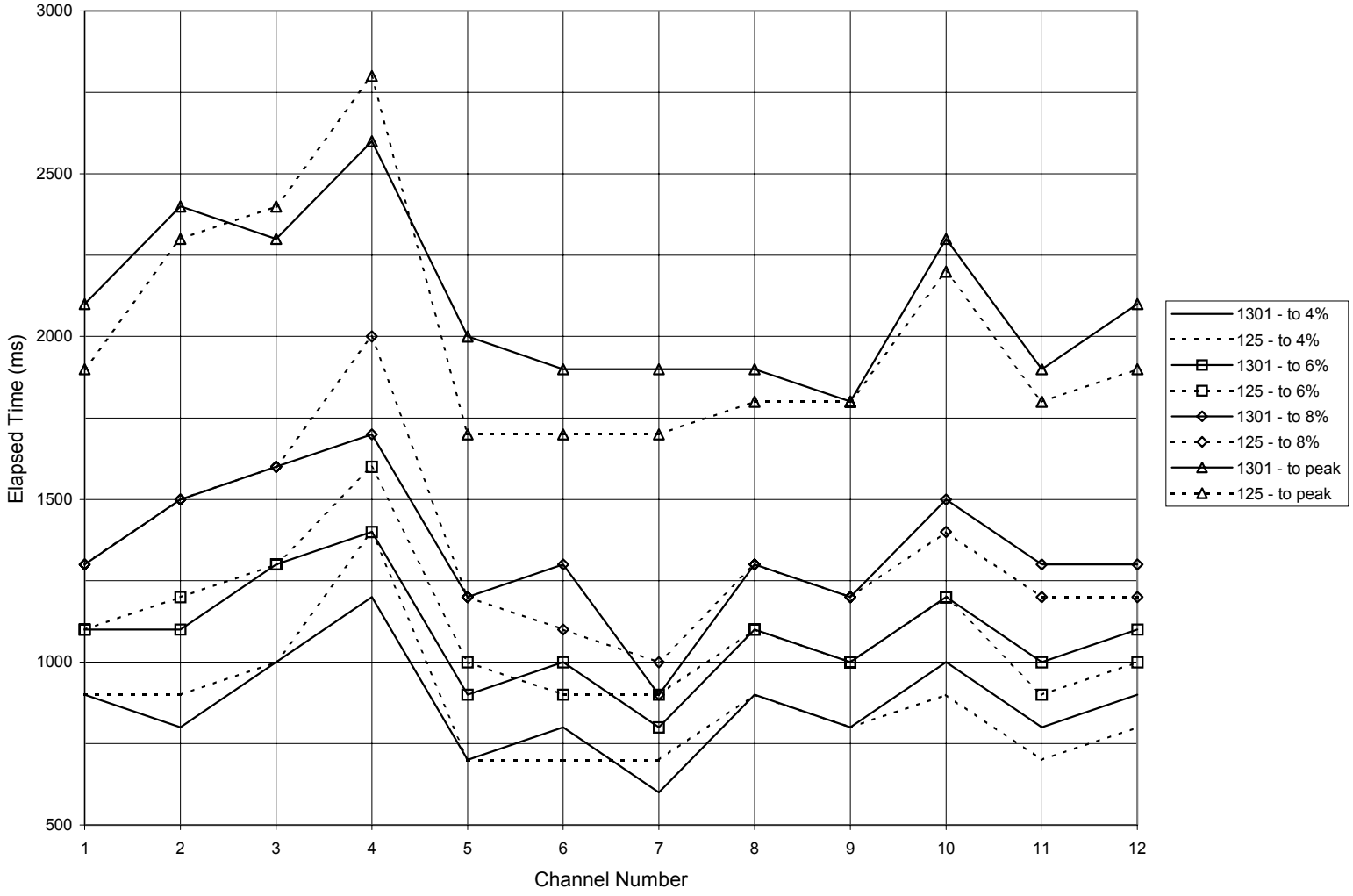

FIGURE 5. COMPARISON OF ELAPSED TIMES DURING POST-DISCHARGE EXPONENTIAL GROWTH

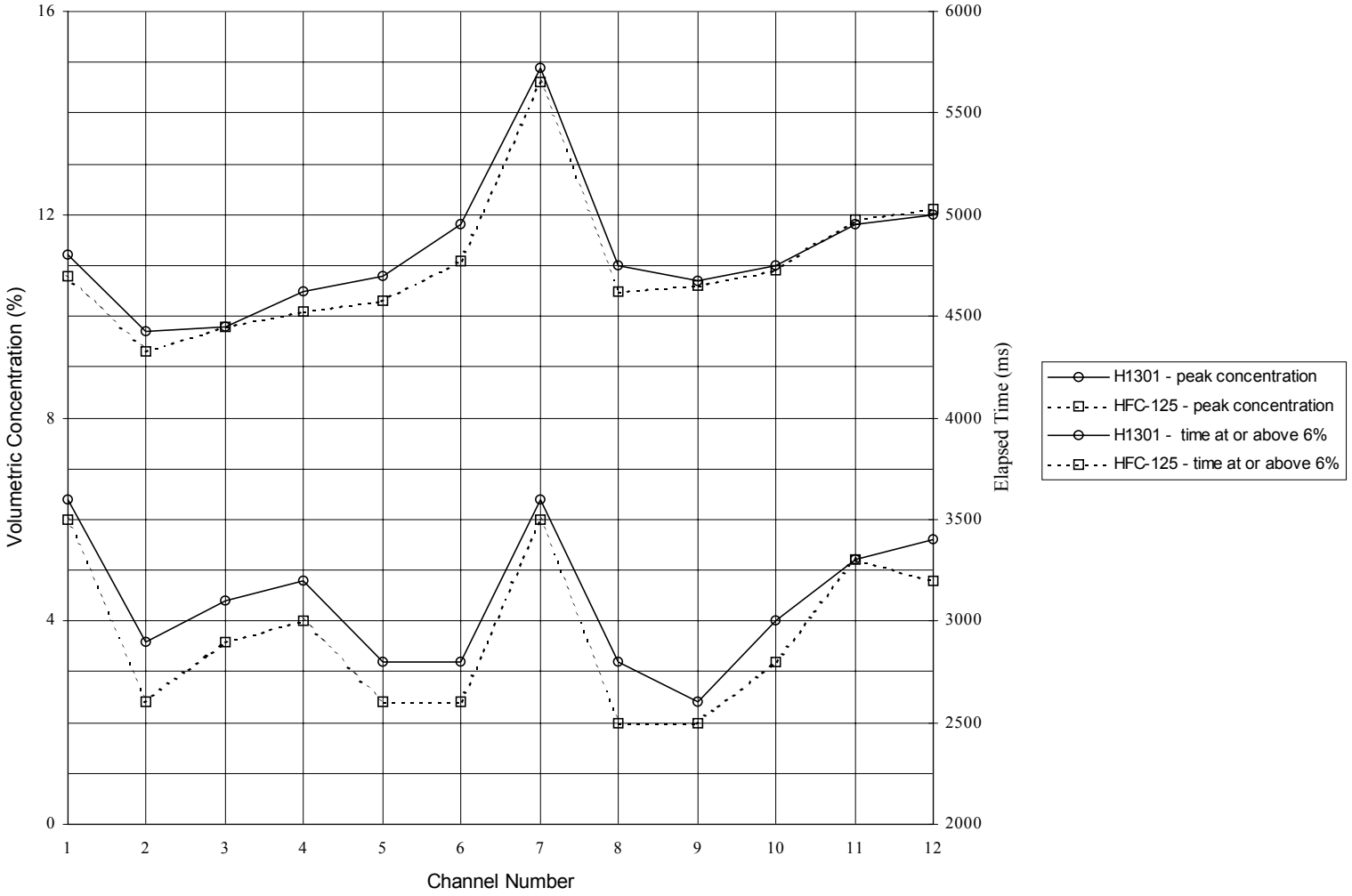

FIGURE 6. COMPARISON OF PEAK CONCENTRATIONS AND COMPLIANT ELAPSED TIMES

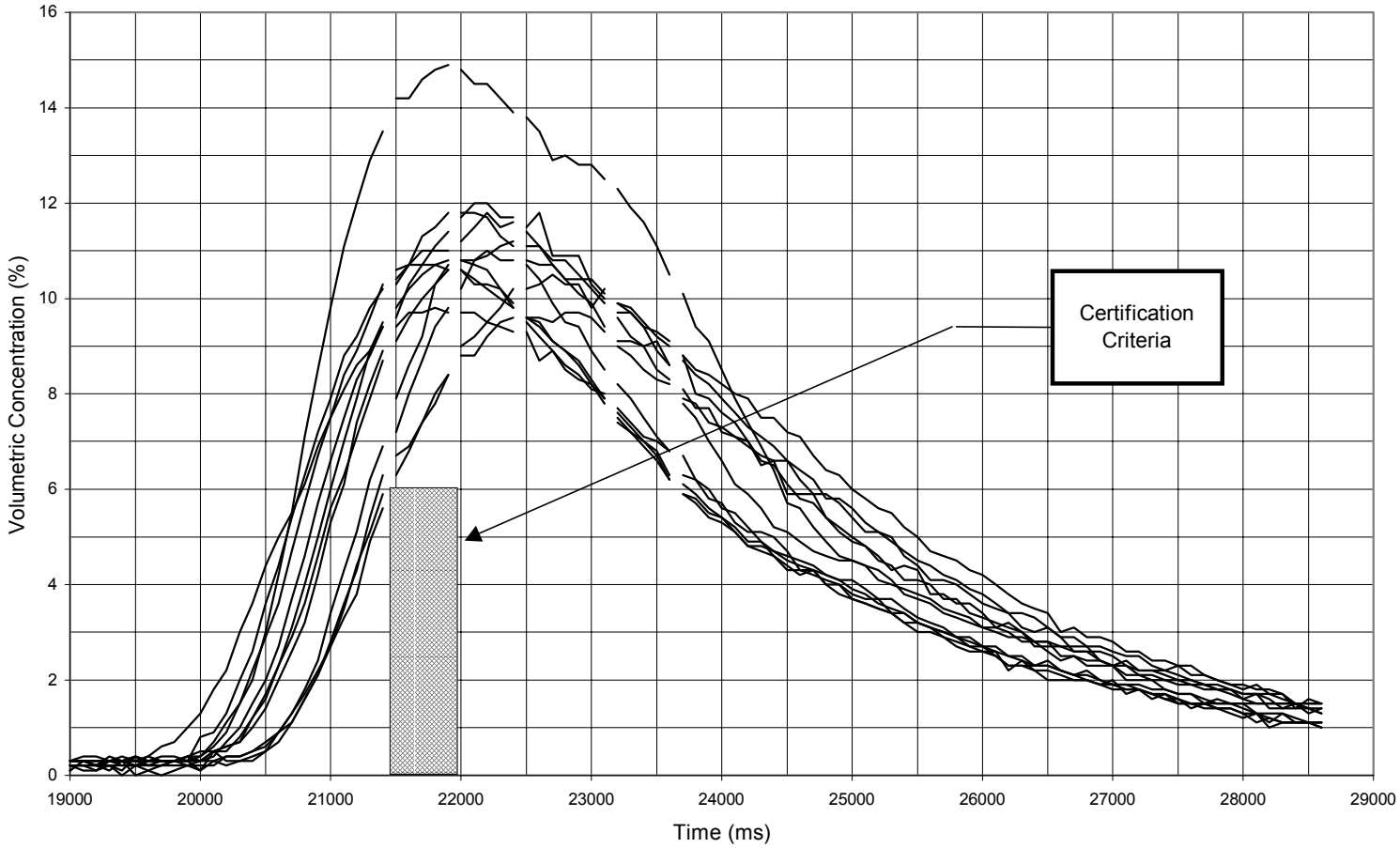

FIGURE 7. HALON 1301 DISTRIBUTION PROFILE, APRIL 1998

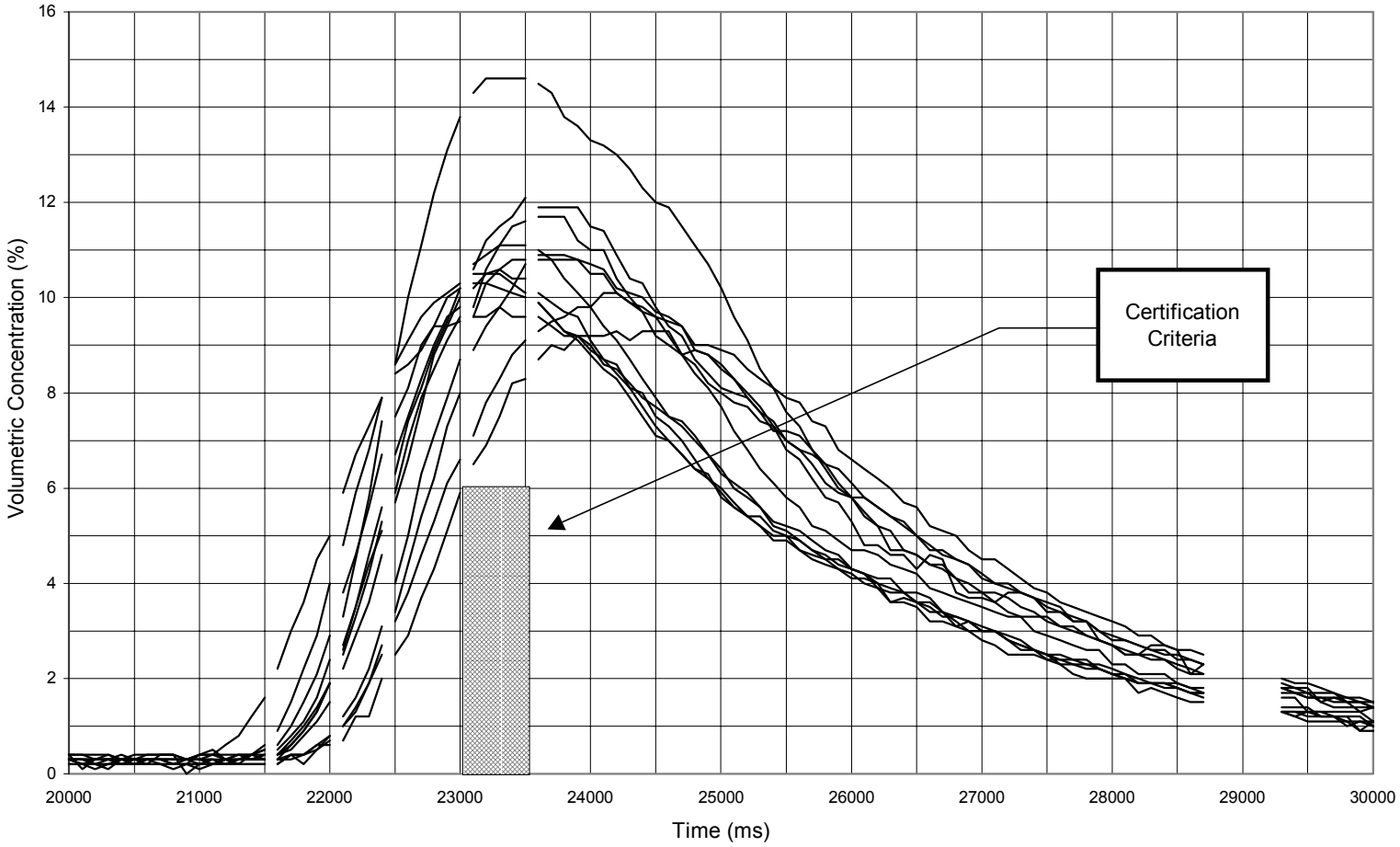

FIGURE 8. HFC-125 DISTRIBUTION PROFILE, APRIL 1998

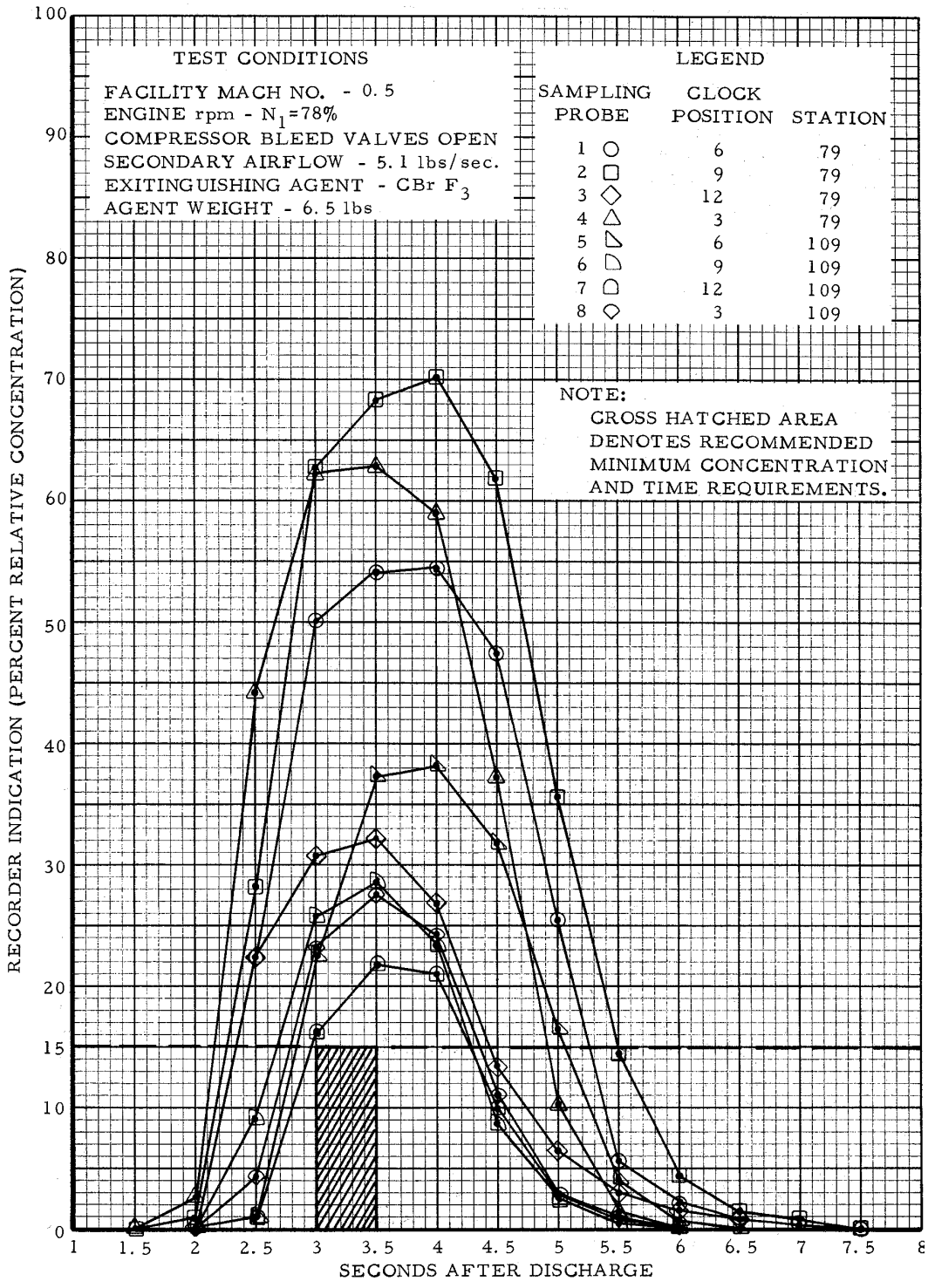

FIGURE 9. LOCKHEED C-140 JET STAR CONCENTRATION PROFILE AT N_1 = 78%
(Sommers, 1970, p. 34)

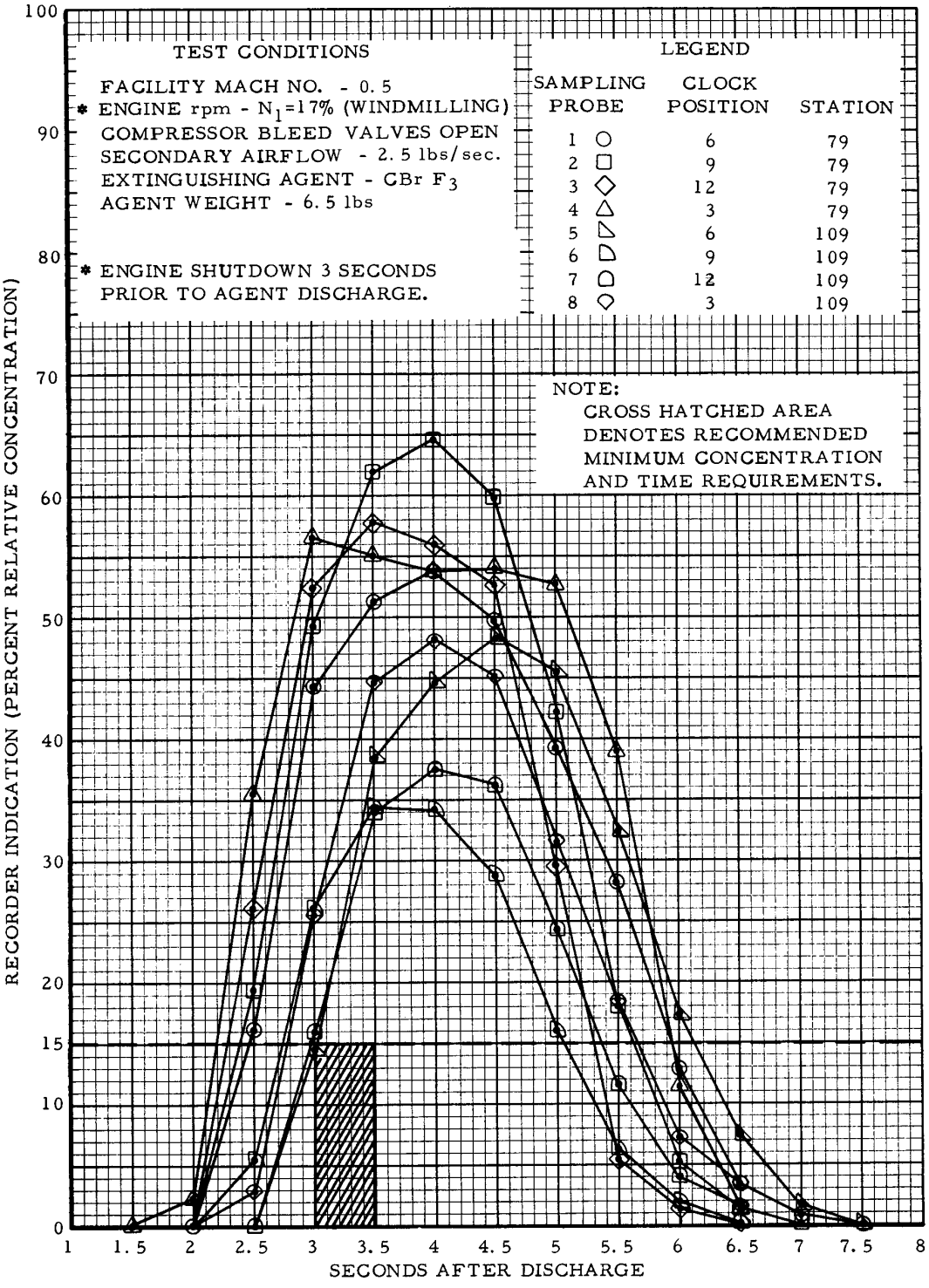

FIGURE 10. LOCKHEED C-140 JET STAR CONCENTRATION PROFILE AT $N_1 = 17\%$
(Sommers, 1970, p. 33)

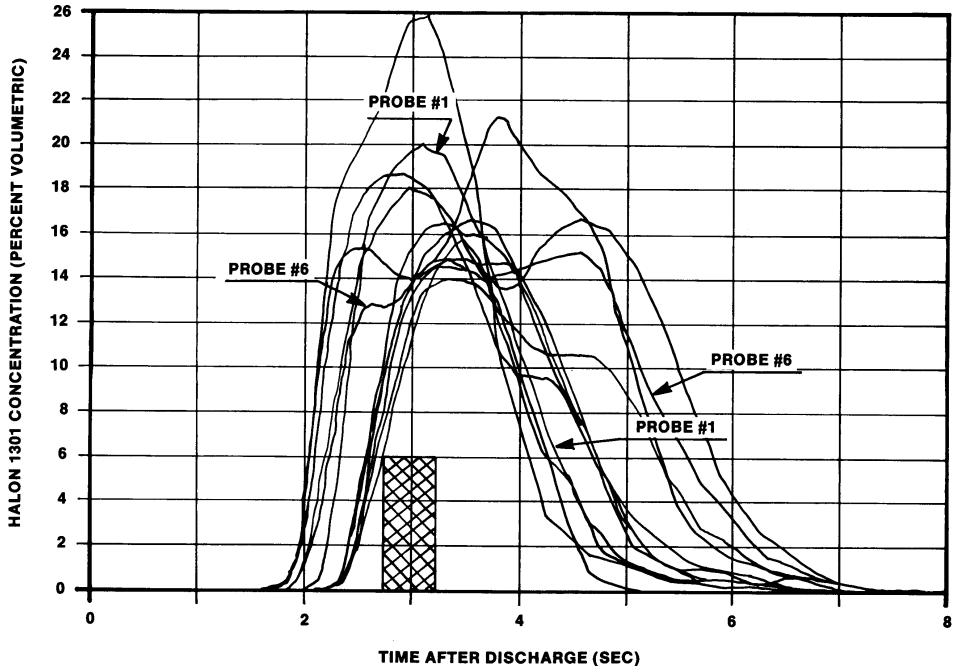

FIGURE 11. GENERAL DYNAMICS F/EF-111 AGENT CONCENTRATION PROFILE FOR TEST 1301-8 (Chamberlain and Boris, 1987, p.57)

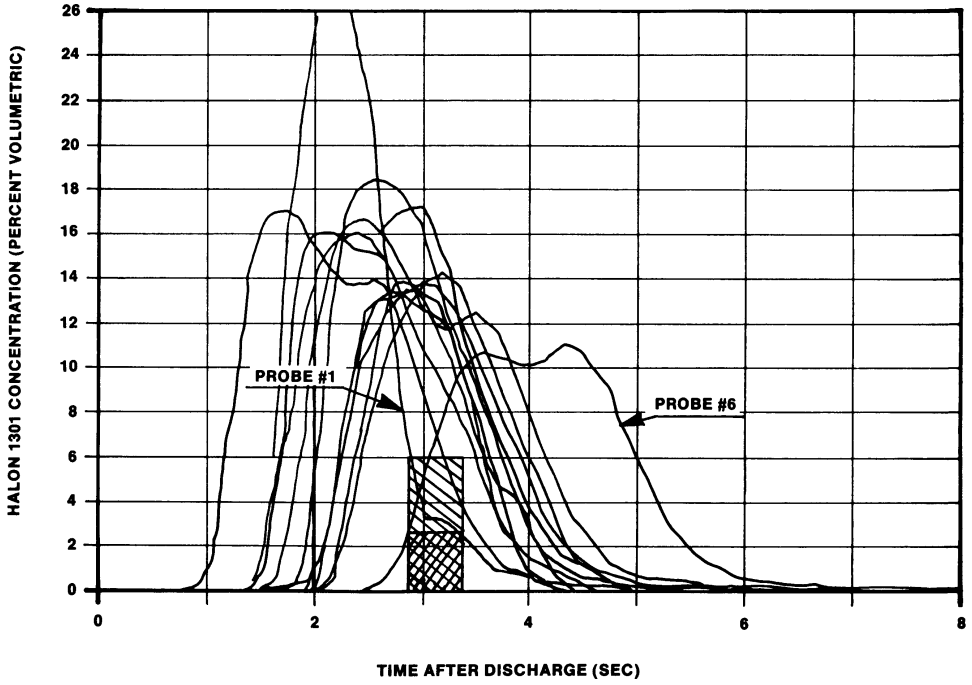

FIGURE 12. GENERAL DYNAMICS F/EF-111 AGENT CONCENTRATION PROFILE FOR TEST 1301-2 (Chamberlain and Boris, 1987, p.49)

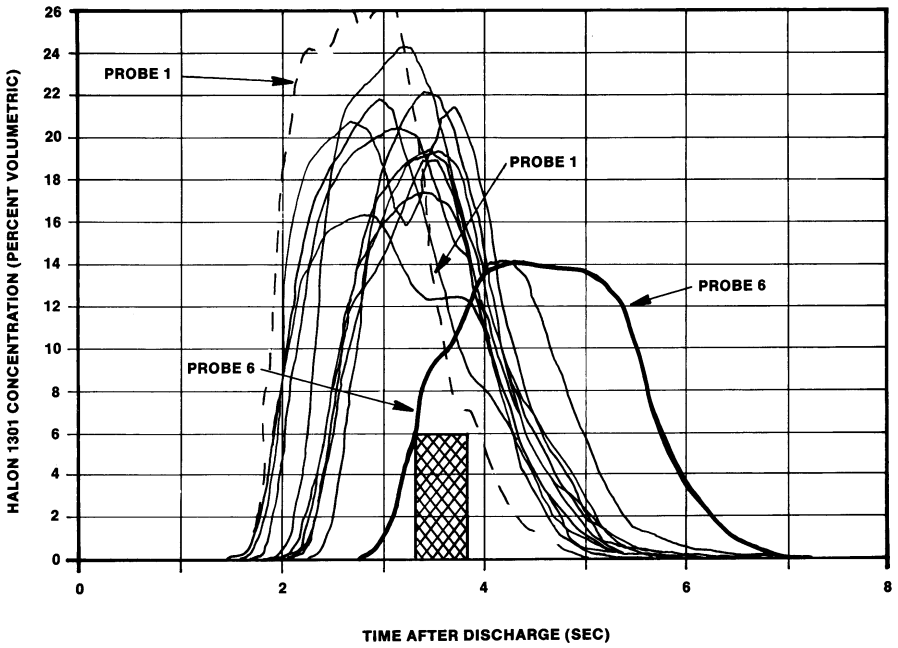

FIGURE 13. GENERAL DYNAMICS F/EF-111 AGENT CONCENTRATION PROFILE FOR TEST 1301-3 (Chamberlain and Boris, 1987, p. 50)

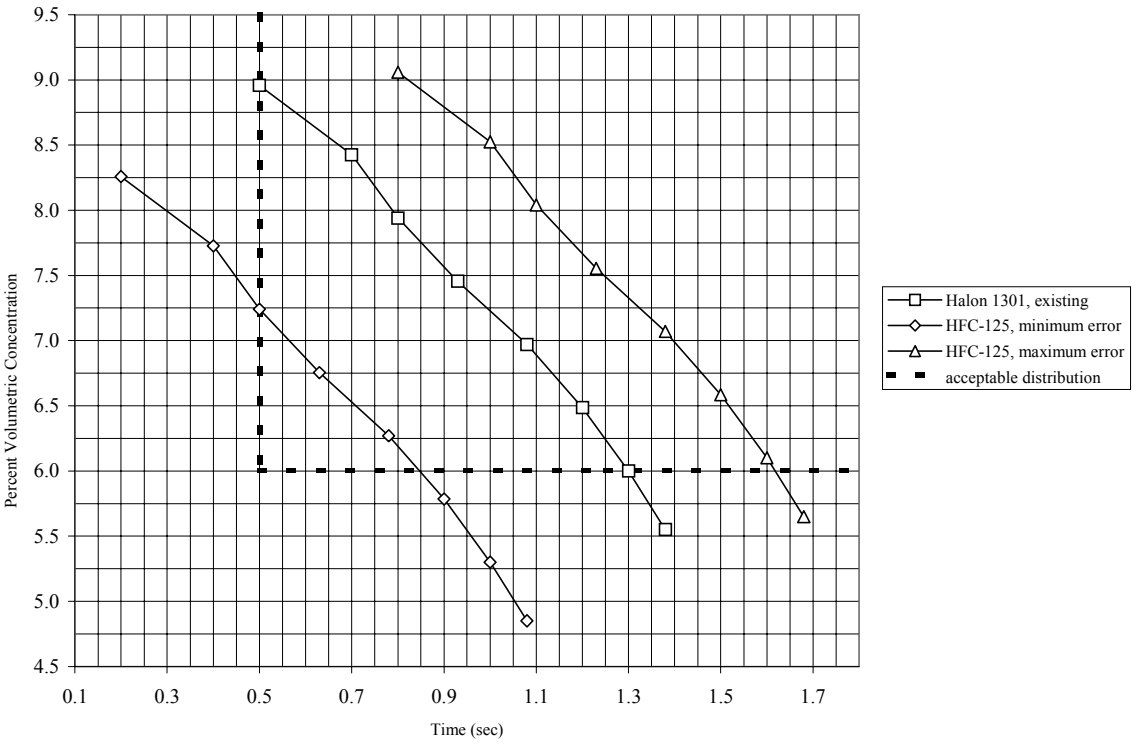

FIGURE 14. ILLUSTRATION OF HFC-125 VARIATION FOR AN ACCEPTABLE HALON 1301 TEST

TABLE 1. NACELLE STATISTICS FOR APRIL 1998 SIMULANT TEST PAIR

Parameter	Units	General	Halon 1301	HFC-125
ambient temperature	°F (°C)	64 (18)		
barometric pressure	inch Hg (mm Hg)	30.2 (767)		
relative humidity	%	42		
nacelle airflow rate	lb/s (kg/s)	2.1 (0.95)		
nacelle ventilation rate	changes/min	2-3		
inlet airflow temperature	°F (°C)	107 (42)		
agent fill density	lb/ft^3 (kg/m^3)		49.0 (785)	37.9 (607)
agent charge weight	lb (kg)		5.50 (2.50)	4.25 (1.93)
bottle pressure	psig (Bar)		600 (41.3)	600 (41.3)
bottle temperature	°F (°C)		64 (18)	64 (18)

TABLE 2. VOLUMETRIC CONCENTRATION CHARACTERISTICS, APRIL 1998 SIMULANT TESTS

Elapsed time for Halon 1301 to achieve volumetric concentration from zero baseline (ms)	Analyzer channel number											
	1	2	3	4	5	6	7	8	9	10	11	12
4% Halon 1301	900	800	1000	1200	700	800	600	900	800	1000	800	900
6% Halon 1301	1100	1100	1300	1400	900	1000	800	1100	1000	1200	1000	1100
8% Halon 1301	1300	1500	1600	1700	1200	1300	900	1300	1200	1500	1300	1300
peak Halon 1301	2100	2400	2300	2600	2000	1900	1900	1900	1800	2300	1900	2100
Difference in elapsed time from Halon 1301 to achieve volumetric concentration (ms)	(negative sign indicates the HFC-125 value is smaller in magnitude than the corresponding Halon 1301 value)											
4% HFC-125	0	100	0	200	0	-100	100	0	0	-100	-100	-100
6% HFC-125	0	100	0	200	100	-100	100	0	0	0	-100	-100
8% HFC-125	0	0	0	300	0	-200	100	0	0	-100	-100	-100
peak HFC-125	-200	-100	100	200	-300	-200	-200	-100	0	-100	-100	-200
Average difference between elapsed times	-50	25	25	225	-50	-150	25	-25	0	-75	-100	-125
Average difference of the averaged times and data span	-23 milliseconds, +248/-127											
Peak volumetric concentration (%V/V)												
Halon 1301	11.2	9.7	9.8	10.5	10.8	11.8	14.9	11.0	10.7	11.0	11.8	12.0
HFC-125	10.8	9.3	9.8	10.1	10.3	11.1	14.6	10.5	10.6	10.9	11.9	12.1
Difference between values	-0.4	-0.4	0	-0.4	-0.5	-0.7	-0.3	-0.5	-0.1	-0.1	0.1	0.1
Average difference between peak values and data span	-0.27% volumetric concentration, +0.37/-0.43											
Elapsed time for concentration equaling or exceeding 6% volumetric concentration (ms)												
Halon 1301	3600	2900	3100	3200	2800	2800	3600	2800	2600	3000	3300	3400
HFC-125	3500	2600	2900	3000	2600	2600	3500	2500	2500	2800	3300	3200
Difference between values	-100	-300	-200	-200	-200	-200	-100	-300	-100	-200	0	-200
Average difference between elapsed times and data span	-175 milliseconds, +175/-125											