DATA DICTIONARY FOR FP48 FIRE HISTORY DBASE IV TABLES

YEARS 1983-95

PROVINCIAL FOREST FIRE CENTER FOREST PROTECTION DIVISION LAND AND FOREST SERVICE

JULY 1996

The purpose of the Fire Report Form, FP48, is to provide necessary documentation of the occurrence and suppression of all wildfires occurring in the Forest Protection Area of the Province of Alberta. The information recorded on the FP48 is used for many purposes, including legal action, timber volume loss, suppression costs, and statistical analysis of the fire management programs: Prevention, Detection and Suppression. The form has been revised over the years and revisions occurred in 1983, 1985, 1988, 1990 and 1994. The data dictionary is all inclusive for those years. Some fields have been dropped, revised and/or added; therefore the values in some fields for certain time periods will be A0" or blank.

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RECORD NO.	FIELD NAME (TYPE)	DESCRIPTION
1	LAT (N 8.4)	Records the latitude of the point of origin of the fire.
2	LONG (N 8.4)	Records the longitude of the point of origin of the fire.
3	FIRENUMBER (A 10)	Fire ID code with the format DFN-nnn-YY where: D = ADistrict≅ F = Forest ID code: A - Athabasca B - Bow Crow E - Edson F - Footner G - Grande Prairie L - Lac La Biche P - Peace River R - Rocky/Clearwater S - Slave Lake W - Whitecourt N = District Number (single number) nnn = fire sequence number for the year (three digits with leading zeros) YY = year (last two digits) Refer to Forestry Circular FPF 9
4	DISTRICT (A 3)	District code with the format DFN, as defined for Record 3.
5	FIRE (N 3)	Fire sequence number for the year, as defined for Record 3.
6	YEAR (N 2)	Year of occurrence of fire; last two digits only

7	FOREST (N 1)	Forest ID code (numeric)
		0 - Athabasca 1 - Bow Crow

		2 - Edson 3 - Footner 4 - Grande Prairie 5 - Lac La Biche 6 - Peace River 7 - Rocky/Clearwater 8 - Slave Lake 9 - Whitecourt * In 1995 Athabasca Forest joined with Lac La Biche Forest
8	LS (A 4)	Legal subdivision (in legal description) where the fire originated. Valid entries: 1-16, NW, NE, SW, SE, N1/2, E1/2, W1/2, S1/2
9	SEC (N 2)	Section number (in legal description) where the fire originated. Valid entries: 1 through 36
10	TWP (N 3)	Township number (in legal description) where the fire originated. Valid entries: 1 through 127
11	RGE (N 2)	Range number (in legal description) where the fire originated. Valid entries: 1 through 30
12	MER (N 1)	Meridian number (in legal description), west of which the fire originated. Valid entries: 4 through 6
13	MU (A3)	Management Unit (added in 1994)
14	ORIGIN (N 1)	Code for the land owner group where the fire originated: 1 = provincial land (Alberta) 2 = private land 3 = Indian reserve 4 = Metis settlement 5 = Province of British Columbia 6 = Province of Saskatchewan 7 = North West Territories 8 = provincial park 9 = national park 10 = USA (added in 1994)
15	GENCAUSE (N 1)	Code for general cause of fire: 0 = other industry (industry other than forest industry or railway) 1 = lightning 2 = resident (a person or equipment during an agricultural activity or

		a person who caused an accidental fire while living in a forest area) 3 = forest industry (any activity related to the forest industry) 4 = railroad (any activity related to the railroad industry) 5 = not used (dropped from the 1961-82 version, was APublic Project) 6 = recreation (caused by a person or equipment during a recreational activity) 7 = incendiary (a fire started wilfully by a person) 8 = misc. known (any other known cause) 9 = unknown
16	OTHERINDUS (N 2)	Added in 1990, no values for 1983-89 Use only when (Record 15) GENCAUSE = 0. Supplemental code for Aother industry≅ cause: 1 = mining 2 = oil and gas 3 = utility 4 = waste disposal 5 = trapping 6 = commercial fishery 7 = commercial transportation 8 = commercial tourism 9 = provincial (projects) 10 = federal (projects)
17	RESPGROUP (A 3)	Added in 1990, no values for 1983-89 Supplemental code for responsible group: First digit = GENCAUSE There is no RESPGROUP for GENCAUSE=Lightning (1), Miscellaneous Known (8) and Unknown (9) 001 = operators 002 = construction workers 003 = contractors 004 = employees; maintenance & service personnel 005 = trappers/commercial fishery 006 = commercial fishermen 099 = others (explain in remarks) 201 = farmers/ranchers/settlers 202 = Indian on reserve 203 = cottage owner 204 = children 205 = absent landowner 299 = others (explain in remarks) 301 = operators 302 = construction workers 303 = maintenance/service personnel

		204 -4
		304 = other employees 305 = contractors
		399 = others (explain in remarks)
		omers (e.q.m. m.remans)
		401 = operators
		402 = construction workers
		403 = maintenance/service personnel
		404 = passenger
		405 = other employees
		406 = contractors
		499 = others (explain in remarks)
		601 = berry pickers
		602 = bikers (non-powered)
		603 = boaters, canoeists, kayakers
		604 = campers
		605 = swimmers
		606 = picnickers
		607 = hikers
		608 = fishermen
		609 = hunters 610 = ATV users
		611 = horseback riders
		699 = others (explain in remarks)
		701 = employment
		702 = insurance
		703 = religion
		704 = grudge
		705 = dare
		706 = cover-up 707 = personal gain
		707 – personal gam 708 = illness
		799 = others (explain in remarks)
		, , , , , , , , , , , , , , , , , , , ,
18	PERMIT	Do not code when $GENCAUSE = 1$ (lightning)
	(L 1)	Was a Fire Permit (FP 69) issued prior to the start of the wildfire?
		(Yes or No)
		Valid entries: Y or N
10	TRUECALIGE	D
19	TRUECAUSE	Do not code when $GENCAUSE = 1$ (lightning)
	(N 2)	Code for true cause of fire:
		1 = abandoned fire (responsible person left site permanently
		before fire was out)
		2 = unsafe fire (fire lit under unsafe conditions)
		3 = insufficient resources (for the size of fire)
		4 = unattended fire (responsible person left site but intended to
		return later)
		5 = insufficient buffer (inadequate fuel-free buffer zone)
		6 = flammable fluids
		
		7 = burning substance (placed on flammable forest fuel) 8 = hot exhaust or exhaust sparks

		10 = UG Unresolv 11 = LS Lack of S 12 = IO Imitating 13 = unpredictable radiation, vel explosion, et 14 = arson known	ved Grievan Supervision Others (<i>dre</i> e happenin nicle or air c.)	pped in 1990) nce (dropped in 1990) (dropped in 1990) ppped in 1990) g (e.g. animal on powerline, solar crash, house fire, pipeline (hazard occurred after the fire was
20	ACTIVITY (N 2)	Do not code when GE Code for specific man Numbers 24-29 and S Numbers 30-31 were	-related act 9 w<i>ere add</i>	tivity classification: <i>led in 1990</i>
		Disposal burning:	1 = 2 = 3 = 4 = 5 = 6 = 7 = 8 = 9 =	windrows piles re-piles (dropped in 1990) brush grass stubble (dropped in 1990) slash refuse flaring gas
		Individual activity:	19 = 20 = 21 = 23 = 24 = 25 = 26 = 30 = 31 =	smoking fireworks (dropped in 1990) cooking unclassified (changed to 99 in 1990) ammunition, fireworks, etc. children playing with matches arson (added in 1990) lighting fires (added in 1990) traditional burning (added in 1990)
		Operating:	10 = 11 = 12 = 13 = 14 = 15 = 16 = 17 =	heavy equipment rail transportation vehicle transportation all-terrain vehicle, motorbike, etc. welders or associated equipment power saws (dropped in 1990) power lines engines (dropped in 1990)

		18 = stoves, lamps (dropped in 1990) 22 = pipelines 27 = air transportation 28 = power saw 29 = refuelling Unclassified: 99 = all other activities
21	SEASON (N 1)	This is the seasonal state of the vegetation and does not necessarily relate to the date. This field was dropped in 1994 and replaced with Weather Values, records 22 - 26. Code for season: 1 - ESP = early spring 2 - ASP = advanced spring (dropped in 1990) 3 - LSP = late spring 4 - ESU = early summer 5 - LSU = late summer 6 - EFA = early fall 7 - LFA = late fall 8 - WI = winter
22	TEMP (N 2)	Temperature values at time of initial attack. (Added in 1994)
23	RH (N 3)	Relative Humidity values at time of initial attack. (Added in 1994)
24	WINDSPEED (N 3)	Wind Speed values at time of initial attack. (Added in 1994)
25	WINDDIR (A 3)	Wind Direction values at time of initial attack. (Added in 1994)
26	WXSTA (C 2)	Weather station code, if readings were taken at established WX station enter the two letter code; if taken at fire site enter AFS≅. (Added in 1994)
27	FFMC (N 2)	Fine Fuel Moisture Code (FFMC) at weather station most representative of the fuel moisture and weather conditions at the time of discovery of fire.
28	DMC (N 3)	Duff Moisture Code (DMC) at weather station most representative of the fuel moisture and weather conditions at the time of discovery of fire.
29	DC	Drought Code (DC) at weather station most representative of the fuel

	(N 4)	moisture and weather conditions at the time of discovery of fire.	
30	ISI (N 5.1)	Initial Spread Index (ISI), to nearest decimal point, at weather station most representative of the fuel moisture and weather conditions at the time of discovery of fire.	
31	BUI (N 3)	Build-Up Index (BUI) at weather station most representative of the fuel moisture and weather conditions at the time of discovery of fire.	
32	FWI (N 3)	Fire Weather Index (FWI) at weather station most representative of the fuel moisture and weather conditions at the time of discovery of fire.	
33	WXSTATION (A 2)	The most representative weather station; use the two letter code. See attached Appendix I.	
34	GENERAL (A 3)	Code for general detection agent responsible for discovering the fire: LKT = lookout AIR = air patrol GRP = ground patrol UNP = unplanned	
35	SPECIFIC (A 4)	Code for specific detection agent that discovered the fire: For GENERAL (Record 34) = LKT SPECIFIC = 2-letter lookout code (see attached) For GENERAL (Record 34) = AIR SPECIFIC = FW for fixed wing aerial patrol RW for rotor wing aerial patrol HAC for helitack MD for man-up machine (loaded patrol)	
		For GENERAL (Record 34) = GRP SPECIFIC = GARD for guardian PATR for patrolman FRST for forest officer PIND for ground patrol by industry	
		For GENERAL (Record 34) = UNP SPECIFIC = LFS for LFS personnel GOVT other government agency PUB for general public UPA for unplanned public aircraft UAA for unplanned LFS aircraft UIND for unplanned industry 427 for 427-FIRE calls	

36	SEENAREA1 (A 3)	The detection agents or agents in whose seen area the fire was discovered. Lookouts: If the fire falls into one or more than one lookout=s seen area (visible and indirectly visible), enter the lookouts= 2-letter ID code for up to three lookouts (Records 36 through 38). If the fire falls in the air patrol seen area (anything not in the lookouts seen area by default) enter AIR.
37	SEENAREA2 (A 3)	See Record 36.
38	SEENAREA3 (A 3)	See Record 36.
39	OUTFOREST (A 2)	Out-of-forest detection agent; i.e. when the fire is from a neighbouring forest, national park, territory, province, country or satellite. 00 = Athabasca 01 = Bow/Crow 02 = Edson 03 = Footner Lake 04 = Grande Prairie 05 = Lac La Biche 06 = Peace River 07 = Rocky/Clearwater 08 = Slave Lake 09 = Whitecourt NW = North West Territories BC = British Columbia SK = Saskatchewan NP = national park US = United States SR = satellite
40	DEFAULT1 (A 3)	Detection agent(s) whose responsibility for discovering the fire did not meet the provincial detection objective and was considered a default. Lookouts: Enter each lookout=s 2-letter ID code in Records 40 through 42. Air patrol: Enter AIR in Record 40.
41	DEFAULT2 (A 3)	See Record 40.
42	DEFAULT3	See Record 40.

	(A 3)	
43	IAOBJECTIV (A 3)	Initial attack getaway objective in minutes. The getaway time is the difference between the reporting and departure times. (5, 10, 30, 60 minutes and PS for Project Status)
44	MEN (N 3)	Initial Attack Amount: (Number of initial attack personnel) Initial suppression forces which took physical suppressive action on the fire from time actual firefighting started to within the first 15 minutes.
45	DOZERS (N 3)	Number of caterpillars or other crawler-tractor equipment in initial attack. See Record 44.
46	HELTANK (N 3)	Number of helitankers (rotary wings using buckets or built in tankers) in initial attack. See Record 44.
47	GROUNDTANK (N 3)	Number of ground tankers (pumper trucks or trailer tankers) in initial attack. See Record 44.
48	AIRTANK (N 3)	Number of airtankers (fixed-wing tankers) in initial attack. See Record 44.
49	IAOTHERS (N 3)	Number of other type of equipment (ATV=s, municipal fire trucks, etc.) used in initial attack. See Record 44.
50	FIXEDWING (N 6.1)	Distance in kilometres the first initial attack force travelled by fixed wing aircraft, from where they were dispatched to the fire site. Initial attack is any suppression activity within the first 15 minutes. There may be more than one type of initial attack force on a fire within this time frame, hence <i>first initial attack</i> force is used for Records 50, 51, 52, 53, 54 and 55.
51	ROTORWING (N 6.1)	Distance in kilometres the first initial attack force travelled by rotor wing aircraft, from where they were dispatched to the fire site.
52	VEHICLE (N 6.1)	Distance in kilometres the first initial attack force travelled by vehicle, from where they were dispatched to the fire site.
53	WALK (N 6.1)	Distance in kilometres the first initial attack force walked, from where they were dispatched to the fire site.
54	DMTOTHERS (N 6.1)	Distance in kilometres the first initial attack force travelled by other means, from where they were dispatched to the fire site.
55	DMTTOTAL (N 6.1)	Total distance in kilometres the first initial attack force travelled, from where they were dispatched to the fire site.

56	INITATTACK	Code for initial attack by:
	(N 2)	Numbers 5-20 were added in 1990, and number 21 was added in 1994.
		1 = AFS (dropped in 1990) 2 = County/MD (dropped in 1990) 3 = prv lo (private landowner) (dropped in 1990) 4 = others (dropped in 1990) 5 = initial attack crew 6 = helitack crew 7 = man-up crew 8 = airtanker 9 = helitanker 10 = ground tanker 11 = forest officer 12 = forest protection staff 13 = other AFS staff (AFS Alberta Forest Service was dropped in 1990 and replaced with LFS Land and Forest Service)
		Others 14 = public 15 = land owner (on whose land fire started) 16 = other agency, incl. federal govt agencies 17 = county; includes county fire department 18 = municipal district; incl. MD fire department 19 = improvement district; incl. ID fire department 20 = Indian reserve; includes IR fire department 21 = industry
57	FIRETYPE (N 1)	Code for type of fire at initial assessment: 1 = ground fire 2 = surface fire 3 = crown fire
58	FUELSPEC (A 10)	Code for type of fuel at initial assessment: 1983 to 1993: 1 = immature pine 2 = mature pine 3 = Black Spruce 4 = White Spruce 5 = deciduous 6 = mixed 7 = slash 8 = grass 9 = cladonia 10 = other; specify in Record 59

		11 = tree muskeg
		1994 to 1995:
		Coniferous: 1 = C-1; spruce-lichen woodland 2 = C-2; boreal spruce 3 = C-3; mature Jack or Lodgepole Pine 4 = C-4; immature Jack or Lodgepole Pine 5 = C-5; Red and White Pine 6 = C-6; conifer plantation
		Deciduous: 7 = D-1; leafless Aspen
		Mixedwood: 8 = M-1; boreal mixedwood - leafless 9 = M-2; boreal mixedwood - green 10 = M-3; dead Balsam fir mixedwood - leafless 11 = M-4; dead Balsam fir mixedwood - green
		Slash: 12 = S-1; Jack or Lodgepole Pine slash 13 = S-2; White Spruce - Balsam slash
		Grass: 14 = O-1a; matted grass
		15 = O-1b; standing grass
59	FUELTYPE (N 2)	1983 - 1993 Other fuel type when Record 58 (FUELSPEC) = 10, enter the fuel type, ie burning vehicles, structures and garbage.
		1994 - 1995 When fuel type doesn=t match the choices in Record 58 enter the fuel type, ie structures, vehicles, garbage.
60	DISCOVSIZE (N 9.1)	Size of fire (in ha) when it was discovered.
61	ACTIONSIZE (N 9.1)	Size of fire (in ha) when the actual firefighting was started.
62	CONTRLSIZE (N 9.1)	Size of fire (in ha) when the fire was controlled.
63	EXTINGSIZE (N 9.1)	Size of fire (in ha) when the fire was extinguished.
64	STARTTIME (N 4)	Time (24-h clock) when the fire was started.

65	DISCOVTIME (N 4)	Time (24-h clock) when fire was discovered.
66	REPORTTIME (N 4)	Time (24-h clock) when fire was reported.
67	RESPNDTIME (N 4)	Time (24-h clock) when fire fighting crew, aircraft or equipment started to fight fire.
68	ACTIONTIME (N 4)	Time (24-h clock) when actual firefighting was started.
69	CONTRLTIME (N 4)	Time (24-h clock) when fire was controlled.
70	EXTINGTIME (N 4)	Time (24-h clock) when fire was extinguished.
71	STARTDATE (D 8)	The date the fire started (this may be an estimated date).
72	DISCOVDATE (D 8)	The date the fire was discovered.
73	REPORTDATE (D 8)	The date the fire was reported.
74	RESPNDATE (D 8)	The date the initial attack force started for the fire.
75	ACTIONDATE (D 8)	The date actual physical firefighting took place.
76	CONTRLDATE (D 8)	The date the fire was under control.
77	EXTINGDATE (D 8)	The date the fire was extinguished.
78	C_B (N 8.1)	Lapse time from discovery to report. Lapse times: All lapse times should be recorded in hours and tenths of hours. Minute equivalences to tenths of hours are as follows: 0-2 min= 0.0h 3-8 min= 0.1h 9-14 min= 0.2h
		15-20 min= 0.3h 21-26 min= 0.4h

		27-32 min= 0.5h 33-38 min= 0.6h 39-44 min= 0.7h 45-50 min= 0.8h 51-56 min= 0.9h 57-60 min= 1.0h
79	D_C (N 8.1)	Lapse time from Report to Started For Fire.
80	E_D (N 8.1)	Lapse time between Started For Fire and Fire Fighting Began.
81	F_E (N 8.1)	Lapse time between Actual Fire Fighting Started and Fire Controlled.
82	DETECTOBJ (L 1)	If the discovery size is equal to or less than 0.1ha. then the detection objective was met. Valid entries: Y and N.
83	REPORTOBJ (L 1)	Was the report time objective of five minutes or less met. Valid entries: Y and N.
84	GETAWAYOBJ (L 1)	Was the Initial Attack Objective as determined by IFMIS met. Valid entries: Y and N.
85	IASIZEOBJ (L 1)	Was the initial attack size objective of 1.2 ha met. Valid entries: Y and N.
86	SIZECLASS (N 1)	1 - Class A = 0.01 to 0.1 ha 2 - Class B = 0.11 to 4.0 ha 3 - Class C = 4.1 to 40.0 ha 4 - Class D = 40.1 to 200.0 ha 5 - Class E = 200.1 + ha
87	PRODUCTIVE (N 10)	Forest land with marketable timber, area in ha.
88	POTENTIAL (N 10)	Forest land with regeneration or other growth indicating it=s potential productivity, area in ha.
89	NONPRODUCT (N 10)	Areas included should be muskeg, rock barrens, marshes, etc., area in ha.
90	CROWN (N 10)	Crown land total (4).($4=1+2+3$) on form, area in ha. Records ($87+88+89=90$). Public land under the protective responsibility of the LFS.
91	PRIVATE (N 10)	Privately owned land, area in ha.

92	OTHERAREA (N 10)	Land under other ownership (i.e. Indian Reserve, Provincial Park, etc.), area in ha.
93	GRANDAREA (N 10)	Combined total of all three areas, area in ha. $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
94	SAWLOG (N 11)	Calculated volume (m;) burned for coniferous timber greater than 20 cm.
95	SMALLWOOD (N 11)	Calculated volume (m;) burned for coniferous timber smaller than 20 cm diameter base height (dbh).
96	DECIDUOUS (N 11)	Calculated volume (m;) burned for all deciduous species.
97	BILLING (L 1)	Forest to indicate if billing of suppression costs is recommended. Valid entries: Y and N.
98	VALUELOSS (N 14)	The value lost in dollars. (dropped in 1994)
99	COSTS (N 14)	The total suppression cost in dollars for the fire
100	ERRORCOUNT (N 2)	Error count.