

VI. Ignition Management Plan 2008

Fire Prevention Bureau - Battalion Chief Don Stein

The graphs displayed in this section of the Madera-Mariposa-Merced Unit Management Plan are to be utilized as tools to reduce future ignitions where prevention activities may be effective. Many charts and tables are presented to illustrate fire ignitions by causes for the years of 2007, 2008 and over the last ten years.

Wild land fire ignition statistics were compiled for the entire 2007 and 2008 year. The MMU Unit experienced 215 fires in 2007 and 176 fires in 2008 within its State Responsibility Area (SRA).

The seven largest fires in the MMU during the 2008 Fire Season were:

1. **Telegraph Fire** at 34,091 acres. Thirty homes were lost.
Cost to suppress the fire \$35,000,000 - \$40,000,000.
Cause is Miscellaneous (target shooting).
2. **Oliver Fire** at 2,789 acres.
Cost to suppress the fire is estimated to be \$12,457,889.
Caused by Lightning.
3. **41 Fire** at 3300 acres.
The cause is Undetermined.
4. **Highway 140 Fire** at 958 acres.
Caused by Lightning.
5. **Romero Fire** at 766 acres.
Cause is Vehicle.
6. **Cottonwood Fire** at 179 acres.
Cause is Vehicle.
7. **Millerton Fire** at 175 acres.
Cause is Undetermined.

Cause Analysis Summary

The subsequent description of fire ignition causes is a result of fire reporting information within MMU on SRA. This information is essential for determining the types of fire prevention activities may be emphasized in areas of the unit.

Undetermined: Undetermined fires are those where no specific causal factor was discovered after investigation. In 2007 and again in 2008 this category involves the highest percentage of use by fire personnel. There were 65 fires in 2007 or 30% of fires in SRA that had causes that were unable to be identified. There were 55 fires in 2008 or 31% of fires in SRA that had causes that were unable to be identified.

Miscellaneous: Miscellaneous fire causes are those fires started by events or activities that cannot be logically placed in any other cause classes. This category was second highest in 2008 with 26 fires or 15% of total SRA fires.

Equipment Use: Equipment use continues to be a leading cause of ignitions. Over the last ten years there were 372 fires (24%) caused by equipment use. The majority of equipment use caused fires are from lawn mowers cutting dry grass. Fires resulted from sparks when a mower blade struck a rock. Other fires resulted from both faulty exhaust systems and exhaust contact with vegetation.

Playing with Fire: Playing with fire is a fire caused by children or adults with diminished mental capacity and do not understand the consequences of their actions. Involved children are counseled following Juvenile Fire Setters / Arson Prevention Program guidelines. In 2008 the number of fires caused by children increased from 11 to 18 fires.

Debris Burning: Debris burning ignitions had little change from 17 in 2007 to 18 in 2008. Debris burning escapes usually results from inadequate clearance, weather conditions, a lack of attendance or a combination of those factors.

Arson: Arson historically may experience a high number of arson caused fires and the following years have minimal arson activity due to prevention efforts including arrest and conviction of arsonists. SRA arson fires increased from 9 in 2007 to 14 in 2008. The 2008 arson fires (7%) running near the ten year average at about 6%.

Lightning: Lightning caused fire are usually contained while small, but some that have severe weather and access problems can grow quickly into large fires. The number of lightning fires reported and the actual amount of fires can be under reported due assigning incident numbers to several lightning fires.

Campfires: Campfire caused fires were not a major cause of vegetation fires with one fire in 2007 and 0 in 2008. Over the last ten years there has been 18 campfire caused fires.

Vehicle: Vehicle caused fires are the result of the vehicle burning and spreading to the wild land or fires caused by the operation or some mechanical failure of vehicles. These fires usually start on the roads edge. Vehicle caused fires could be responsible for many of the undetermined causes since ignitions dealing with vehicle exhaust starts are difficult to determine

Smoking: Ignitions resulting from smoking remained low.

Electric Power: Powerline caused fires may be started by vegetation touching the powerline, fallen wires, animals or other objects coming in contact with the wires or mechanical failure of transmission connectors and equipment. Utility companies clear the vegetation near the powerlines in accordance with Public Resource Code 4293-4296. Fires resulting from electrical sources amounted to 5 fires in 2007 and 2 in 2008.

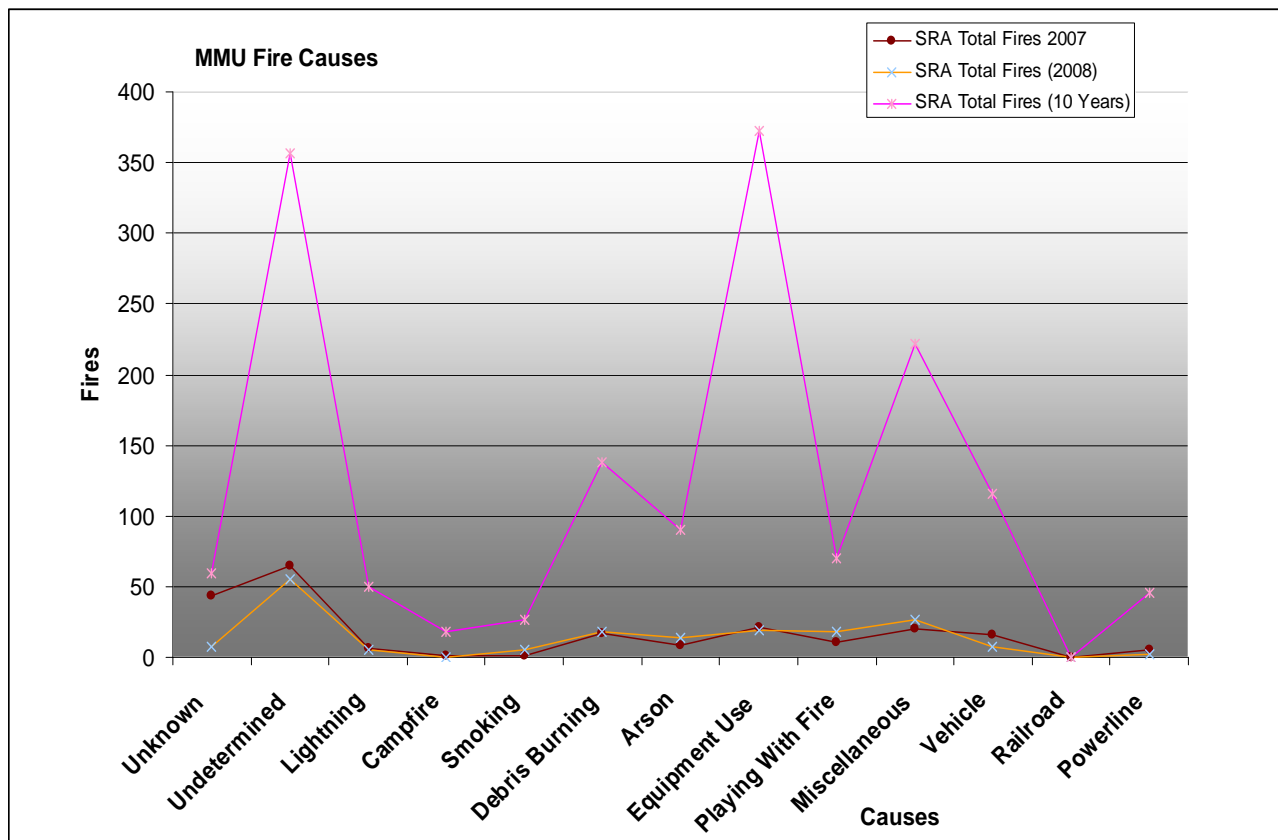


Figure 22 - Madera-Mariposa-Merced Unit Fire Causes

Cause	Battalion 17 2007 SRA	Battalion 4211 (2007)	Battalion 4212 (2007)	Battalion 4214 (2007)	Battalion 4215 (2007)	SRA Total Fires 2007
Unknown	5	6	10	13	9	43
Undetermined	13	6	6	9	31	65
Lightning	0	1	3	0	2	6
Campfire	0	0	0	0	1	1
Smoking	0	0	0	0	1	1
Debris Burning	2	4	5	5	1	17
Arson	1	1	4	2	1	9
Equipment Use	3	1	1	5	11	21
Playing With Fire	0	0	0	2	9	11
Miscellaneous	0	0	4	0	16	20
Vehicle	3	3	0	1	9	16
Railroad	0	0	0	0	0	0
Power line	1	1	0	1	2	5
Total	28	23	33	38	93	215

Table 10 - Fires Causes for Madera –Mariposa-Merced State Responsibility Area (SRA) for 2007

Cause	Battalion 4211 (2008)	Battalion 4212 (2008)	Battalion 4214 (2008)	Battalion 4215 (2008)	Battalion 17 (2008 SRA)	SRA Total Fires (2008)
Unknown	0	0	2	4	1	7
Undetermined	4	4	7	17	23	55
Lightning	1	1	3	0	0	5
Campfire	0	0	0	0	0	0
Smoking	0	1	1	2	1	5
Debris Burning	4	8	3	3	0	18
Arson	0	6	3	5	0	14
Equipment Use	6	1	4	6	2	19
Playing With Fire	2	1	2	12	1	18
Miscellaneous	4	8	3	6	5	26
Vehicle	4	1	0	2	0	7
Railroad	0	0	0	0	0	0
Power line	1	1	0	0	0	2
Total	26	32	28	57	33	176

Table 11 - Fires Causes for Madera –Mariposa-Merced Unit State Responsibility Area (SRA) for 2008

Cause	Battalion 4211 (10 Year)	Battalion 4212 (10 Year)	Battalion 4214 (10 Year)	Battalion 4215 (10 Year)	Battalion 17 SRA (10 Year)	SRA Total Fires (10 Years)
Unknown	7	12	16	18	6	59
Undetermined	48	58	57	58	136	357
Lightning	10	19	12	5	4	50
Campfire	2	5	6	2	3	18
Smoking	2	4	8	4	9	27
Debris Burning	27	67	31	8	5	138
Arson	13	27	24	13	13	90
Equipment Use	80	72	66	45	109	372
Playing With Fire	11	13	21	21	4	70
Miscellaneous	28	37	46	68	43	222
Vehicle	20	11	12	24	49	116
Railroad	0	0	0	0	0	0
Power line	10	9	9	2	16	46
Total	258	334	308	268	397	1565

Table 12 - Fires Causes for Madera –Mariposa-Merced Unit State Responsibility Area for 10 Years

Battalion One Ignition Causes

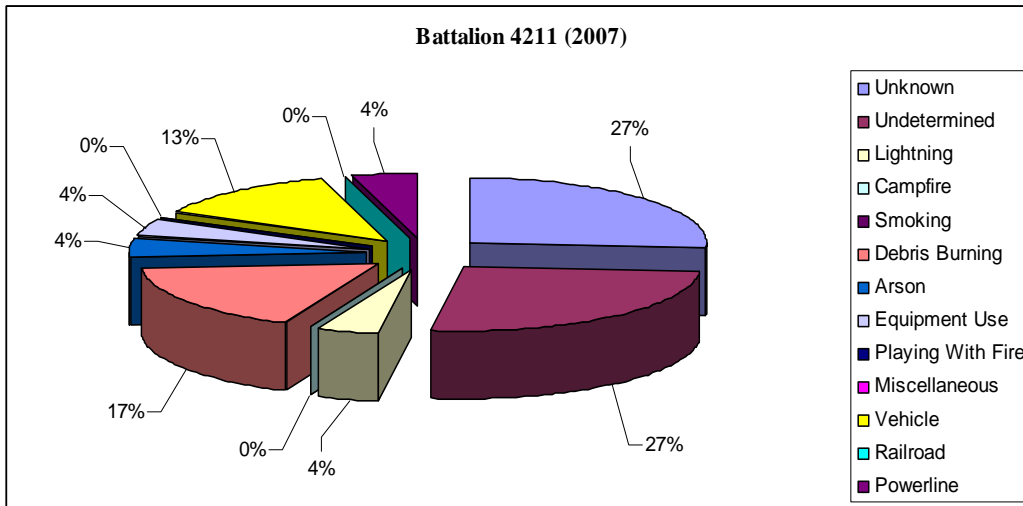


Figure 23 - Battalion 1 Ignitions Cause for 2007

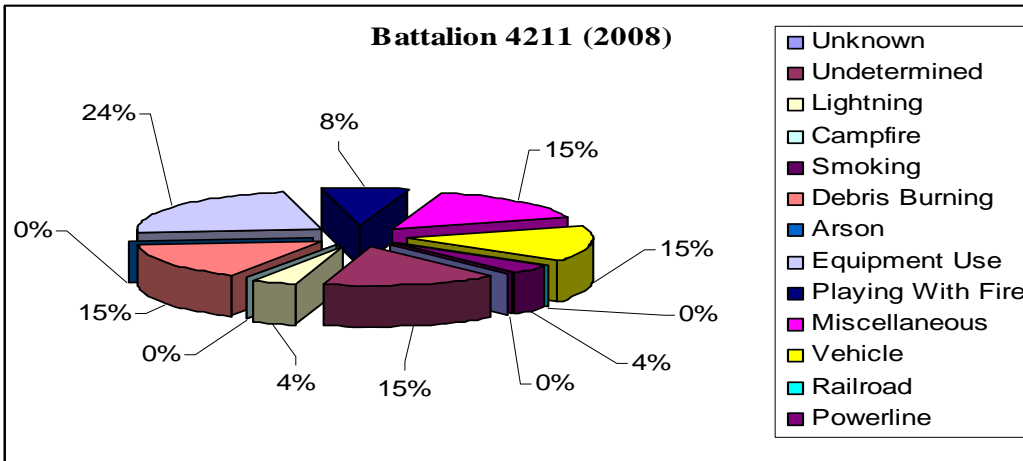


Figure 24 - Battalion 1 Ignitions Cause for 2008

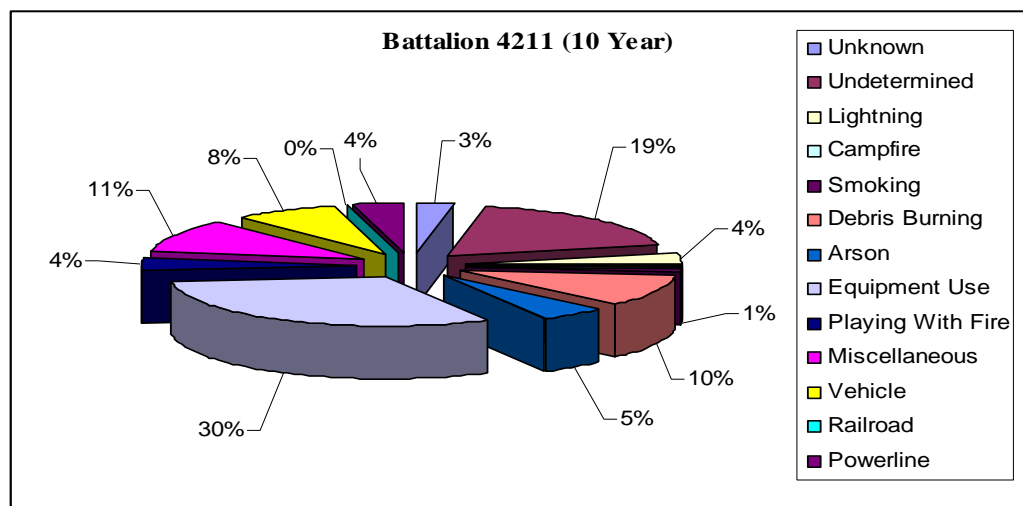


Figure 25- Battalion 1 Ignitions Cause for last 10 years

Battalion Two Ignition Causes

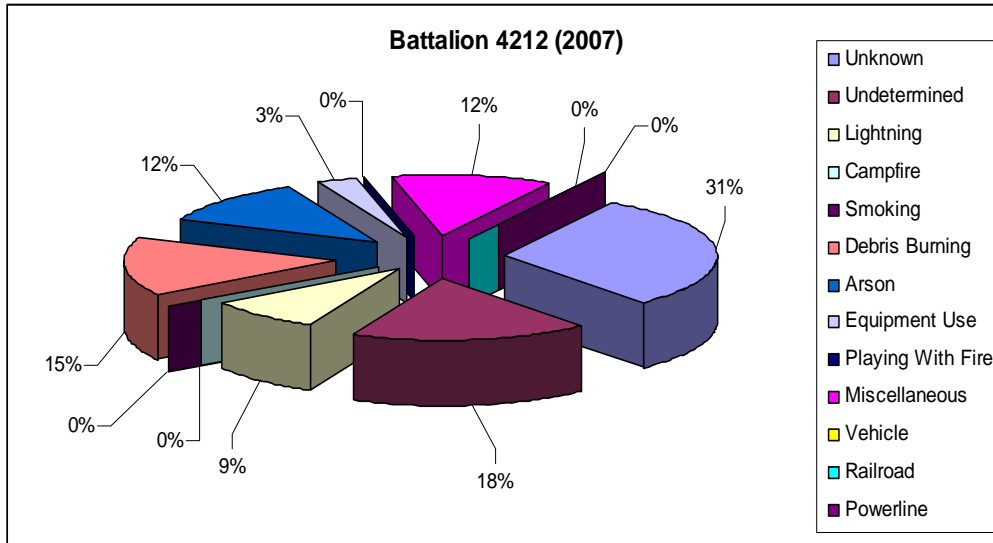


Figure 26 - Battalion 2 Ignitions Cause for 2007

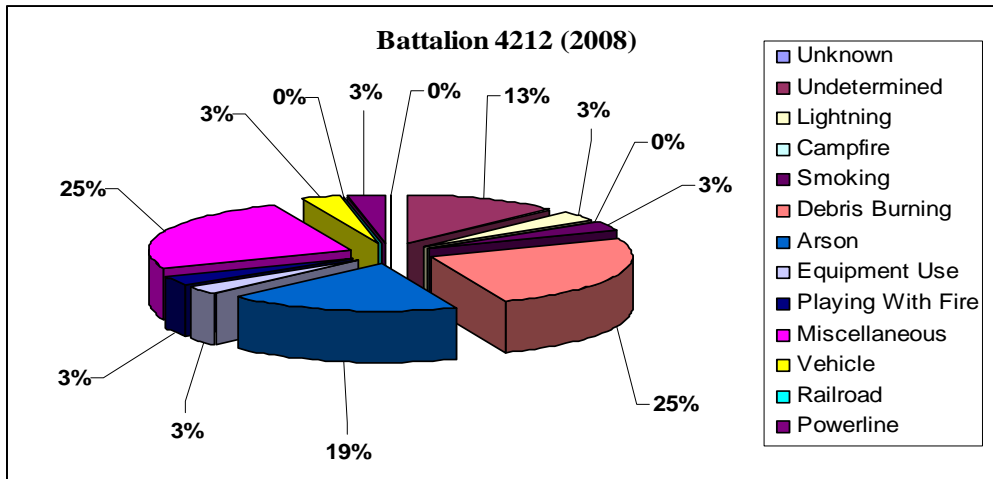


Figure 27 - Battalion 2 Ignitions Cause for 2008

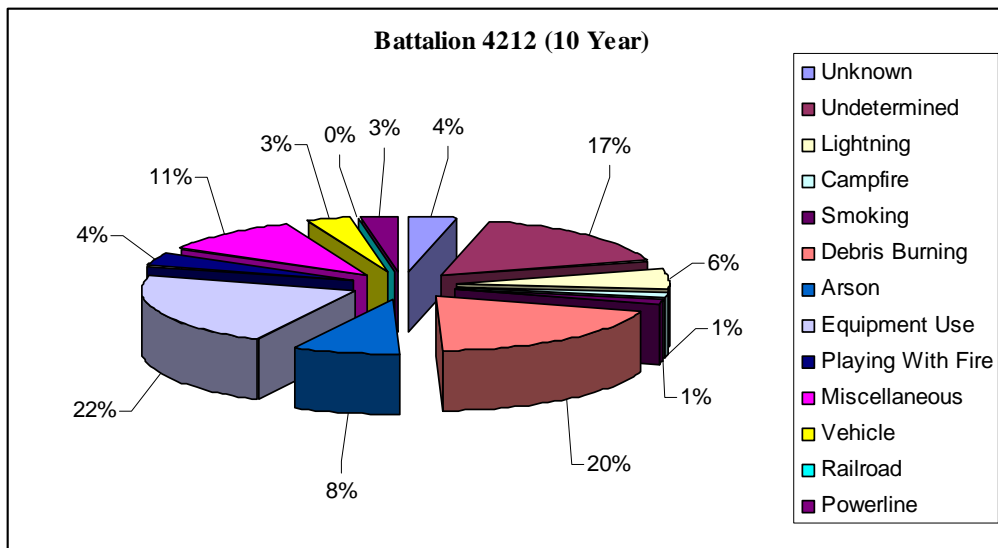


Figure 28- Battalion 2 Ignitions Cause for last 10 years

Battalion Four Ignition Causes

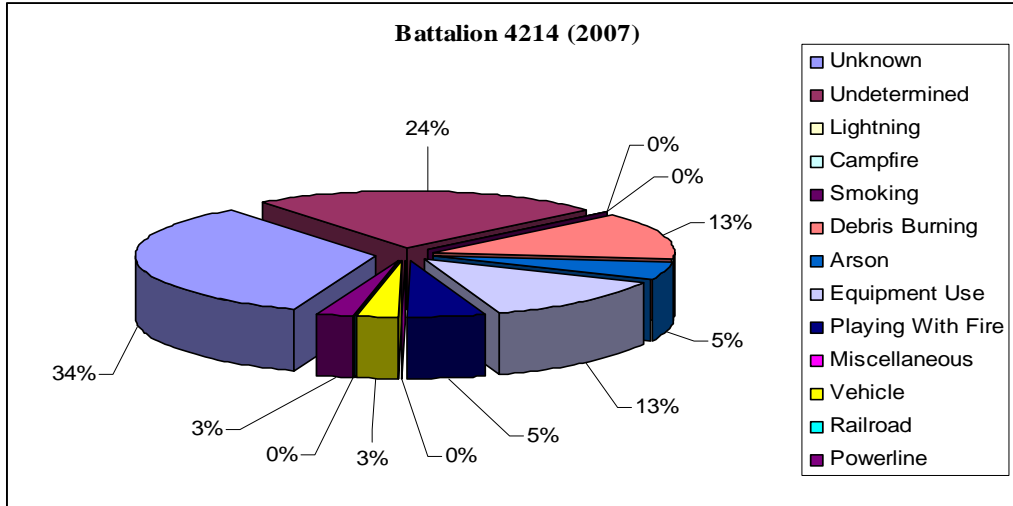


Figure 29 - Battalion 14 Ignitions Cause for 2007

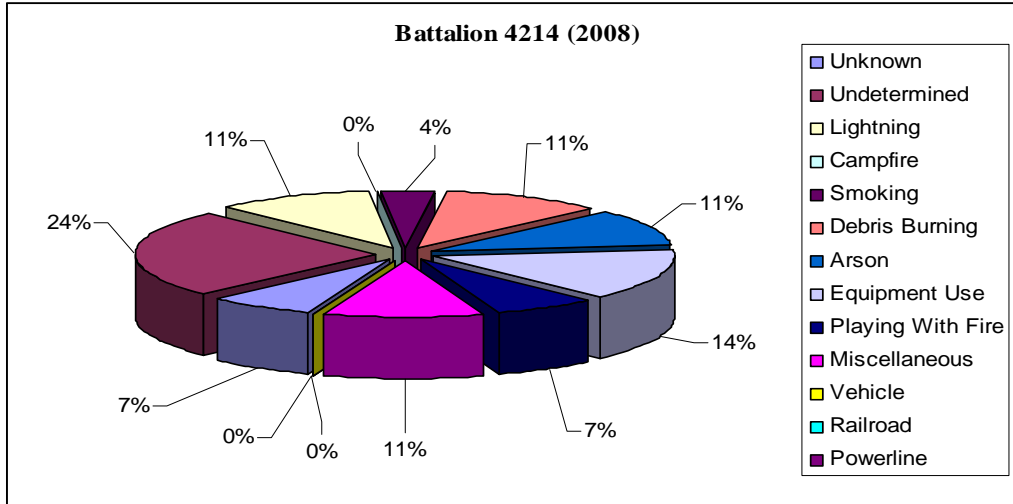


Figure 30 - Battalion 14 Ignitions Cause for 2008

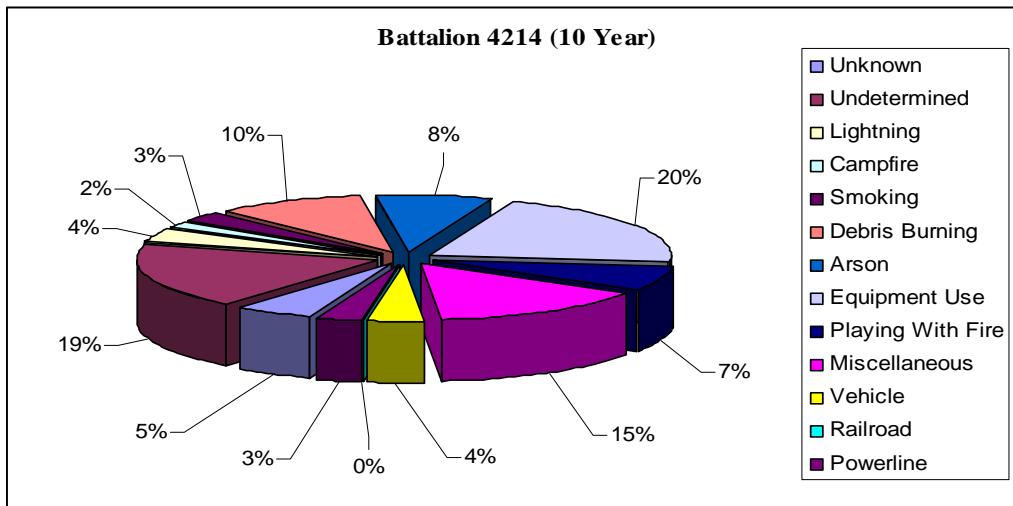


Figure 31- Battalion 14 Ignitions Cause for last 10 years

Battalion Five Ignition Causes

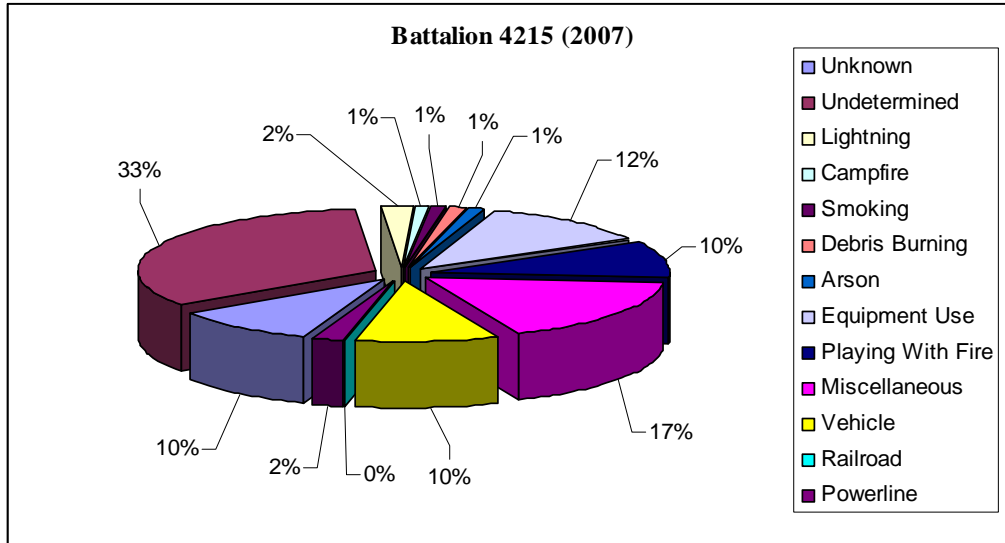


Figure 32 - Battalion 15 Ignitions Cause for 2007

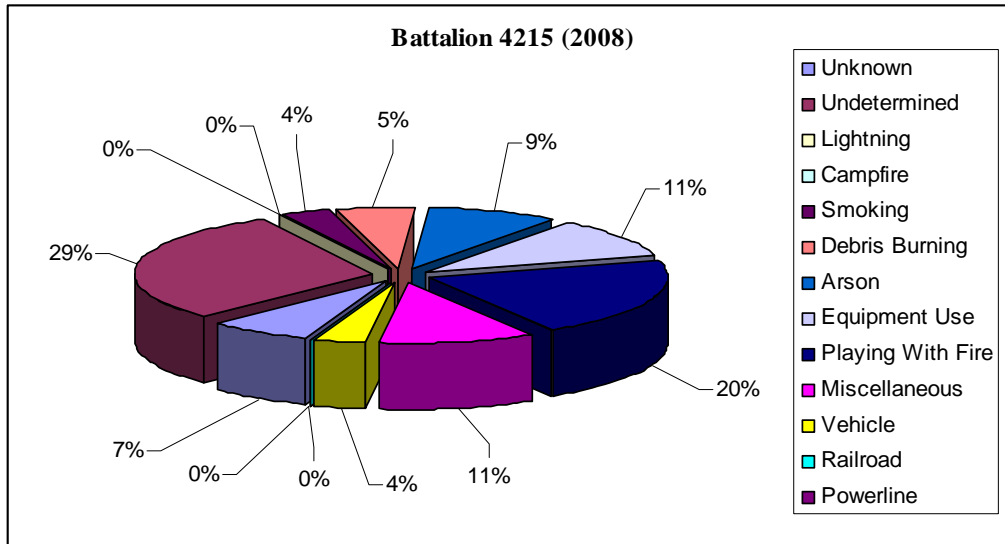


Figure 33 - Battalion 15 Ignitions Cause for 2008

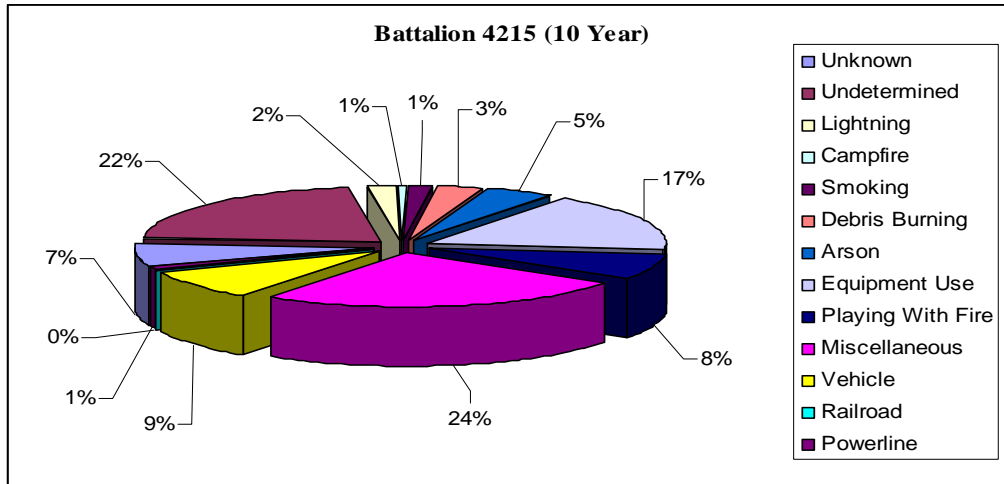


Figure 34 - Battalion 15 Ignitions Cause for last 10 years

Battalion 17 Ignition Causes

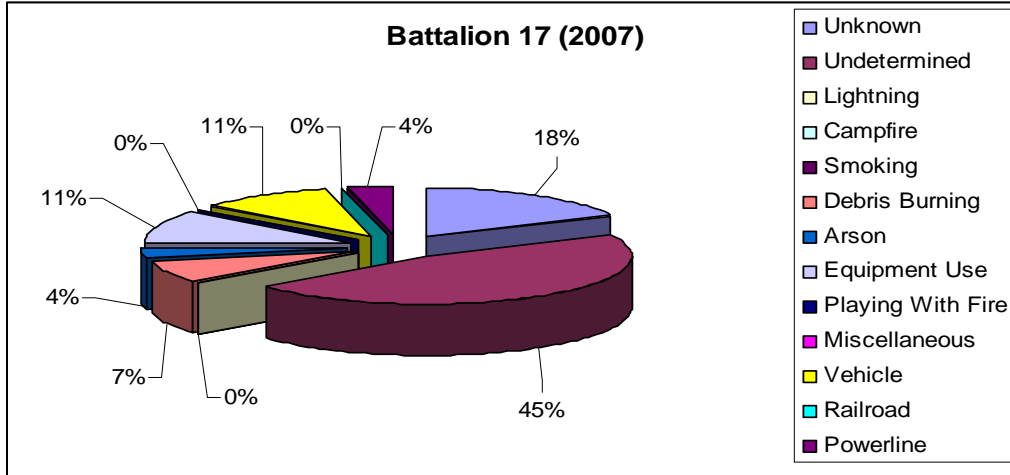


Figure 35 - Battalion 17 (SRA) Ignitions Cause for 2007

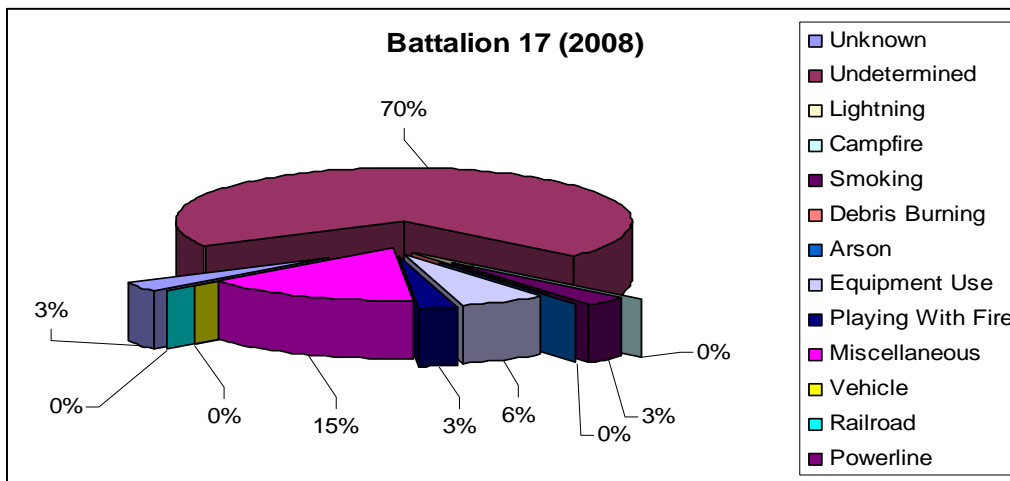


Figure 36 - Battalion 17 (SRA) Ignitions Cause for 2008

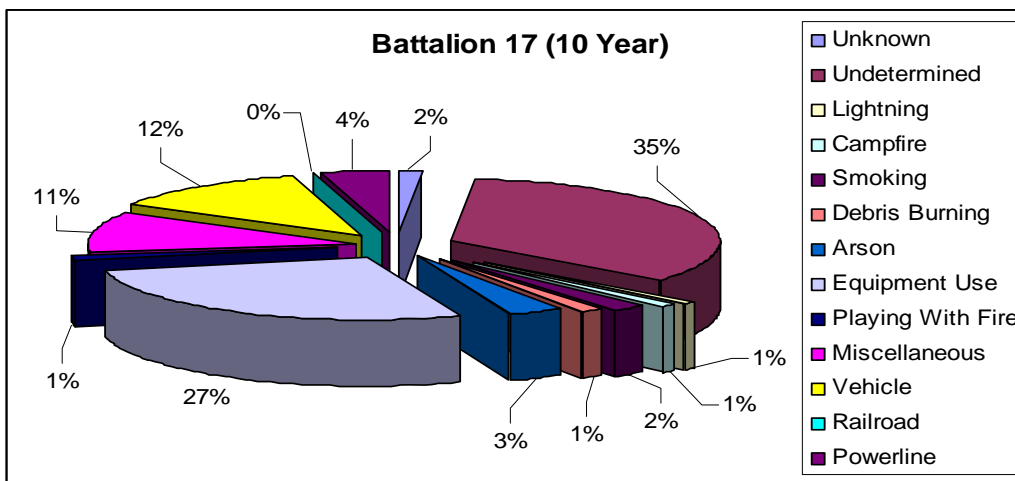


Figure 37 - Battalion 17 (SRA) Ignitions Cause for last 10 years