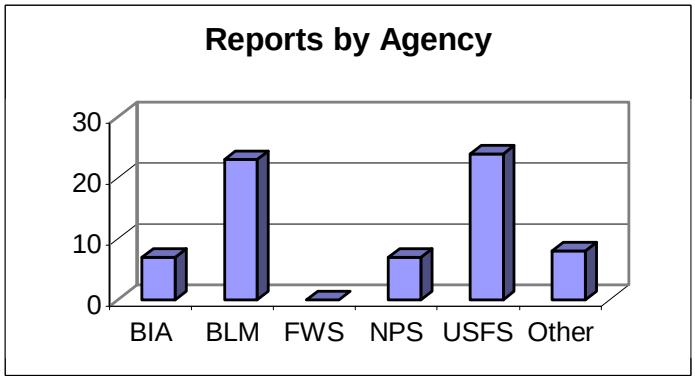
2000 SAFENET REVIEW

This season was the inaugural year for SAFENET. The goal of the program is to function as a collector of raw data to be used in monitoring fire safety trends. At the same time, SAFENET provides a means of sharing safety information throughout the fire community and, hopefully, helps facilitate corrective actions.

Between the beginning of the year and the first of October, 68 SAFENETS were filed. Although this is a relatively low number for a fire season of this magnitude, we are still encouraged by this first year result. Because of the geographical and agency diversity of the filings, this can be considered a representative sample of the wildfire community. This report summarizes the SAFENETS by reporting agency, contributing factors, jurisdiction, incident type, incident activity, stage of incident, and management level of the fire.

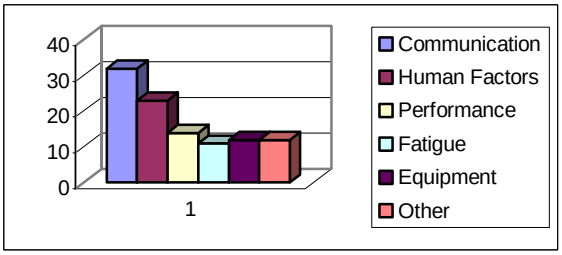
Reporting Agency



Of the reports filed, seven of them were BIA, twenty-three by the BLM, seven by the NPS, twenty-four by the USFS, and eight by other agencies, predominantly state.

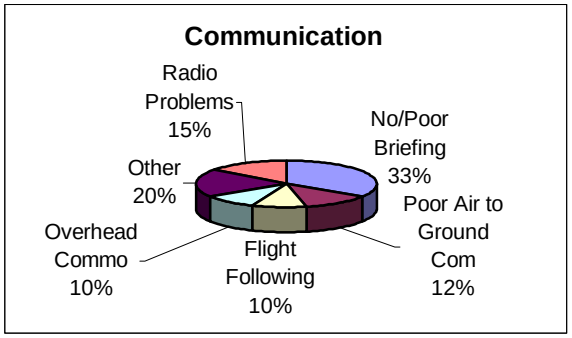
Contributing Factors

SAFENET categorizes each response into one of nine contributing factors; communication, human factors, performance, fatigue, equipment, fire behavior, environmental, situational awareness, or other. The results are as follows.



Communication

Clearly the greatest concern in this group of reports is communication. Of the 68 SAFENETS reviewed, 32 report "problems with communication" as being the major factor in terms of a health and safety concern. Of these, 21 identify a breakdown in the transfer of information. The majority of the respondents cited "no briefing" as the biggest communication problem.



The following summations are taken from the SAFENETS, and describe the relevant issue:

- no field briefing prior to firing operation
- no briefing - frequency changes not communicated
- lack of briefing
- briefing not given
- no overhead communication w/IC
- poor communication w/IC
- crews not receiving information
- about fire status
- lack of info, no knowledge of nearby burn-out operation
- no briefing, no frequency assignments
- no overhead communication
- no briefing on arrival
- lack of fire info being communicated
- briefing with old, outdate information, no fire weather
- briefing not given, organization not identified
- crews not notified of aerial seeding operation during rehab
- need better communication between ground crews and air ops
- good air to ground comm between pilot and ground person on site required
- different agencies working in USA should be briefed on procedures for heli ops
- no briefing until told to receive one, no manifest
- burning out under module w/out any warning/communication
- no lookouts, lack of communication, overhead fatigued, upslope wind, slop-over

9 reports identify a problem with communication as it relates to frequency and use. The majority of these are specific to aviation operations and of the aviation problems, 4 of them were specific to flight-following interferences.

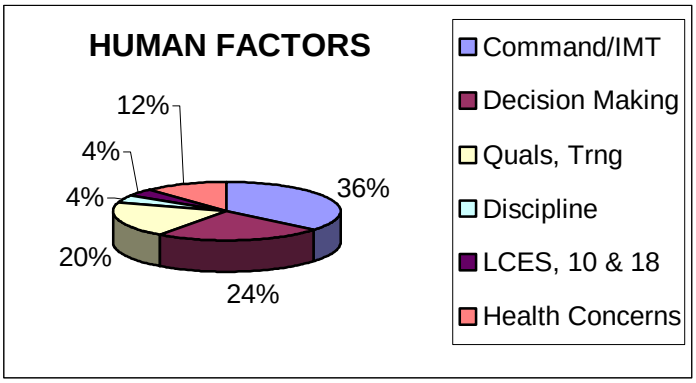
- helicopter drops without crew notification - crew nearly hit with snag
- flight-following frequency being used by many other operations
- paging and flight-following activities on same frequency
- flight-following interfered with by paging on same frequency
- flight following and dispatch of resources on same frequency

- no comm between ground crews & helicopters doing bucket work.
- helicopter drops without ground contact
- additional radios with approved incident frequencies would aid communication
- frequency coordination

9 reports identify communication problems of other varieties.

- a need for temporary repeaters
- 3&4 relays
- fire operations using same channel as LE, SAR, Medivac etc...
- not enough repeaters
- no personnel in dispatch during fire operations
- crew boss unable to make radio contact during dangerous situation
- bad communication - crew boss unable to make contact
- delayed medical attention
- sent drivers out w/out radios (gsul) didn't have enough on incident

HUMAN FACTORS - 23

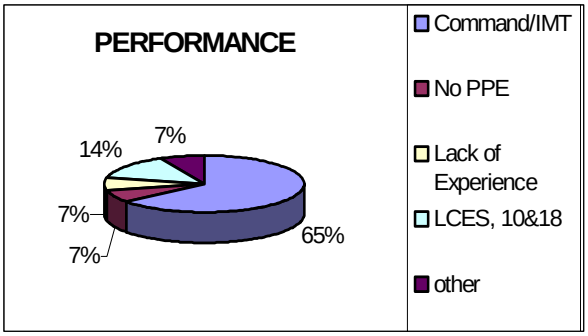


! coordination difficulties

! breakdown in command and control.
! unified command conflicts
! under staffed with resources for operation
! no command structure
! IC left before crews were demobed, no logistical support (food & medical)
! commander gave improper, unsafe direction...
! chain of command, span of control
! crew members w/limited or no wildland experience
! crew forced to run - wrong decision for accessing fire
! of 10 orders, 7 violated. Of 18 situations, 10 violated.
! no MEDL on IMT
! crew advised to break speeding laws, unsafe driving
! ground support didn't know they had 2x4 vehicles
! basic needs of crew not being met
! lack of hand-washing facilities, porta-potties not maintained
! lack of experience in fire behavior & sound line construction methods
! lack of training and/or experience
! Need fulltime FMO - unqualified FF was IA alone & operating chainsaw.

! DIVS(t) conducting burnout below IHC without notification, after told not to.
! DIVS with no PPE - no shelter, no nomex, no hard hat, no gloves
! bucket drops from sewage pond - dipping ordered by LEO not assigned to fire
! red card currency issues
! food service not using gloves
! alcohol use, lack of discipline, assault

PERFORMANCE - 14



- lack of command structure
- no PPE DIVS
- lack of experience
- chain of command
- no command structure
- IC sleeping - no backup
- IC operating bulldozer
- 2 reporting 10, 18 and LCES violated
- FF stay clear of load during long line ops until pilot releases
- IMT disregard for well-being of crew, unable to obtain dry clothing
- shifting people while helicopters loading, poor helispot management
- DIVS(t) should not have been involved in burnout decision & failed to notify
- Lack of discipline, lack of screening, failure to deal with a situation

SITUATIONAL AWARENESS - 31

All but 1 have been identified in other contributing factors. Having no briefing, and the lack of command structure were the majority. The only report that identifying situational awareness as the primary issue, was the grizzly bear near spike camp.

FIRE BEHAVIOR - 18

Only 2 SAFENETS identify a situation where the safety and health issue was directly related to fire behavior. Both were fire behavior problems caused with wind changes. Several report fire behavior not being communicated to crews, and those are identified in the communications section.

ENVIRONMENTAL- 13

There were no specific environmental causes outside the human factors realm.

FATIGUE - 11

- 4 cite failure to follow work rest guidelines.
- 1 reports single resources driving alone.
- 1 reports an IC sleeping while crews are working and leaving no-one in charge.
- 2 report overhead team too fatigued.
- 3 checked the fatigue box but did not address it specifically in narrative.
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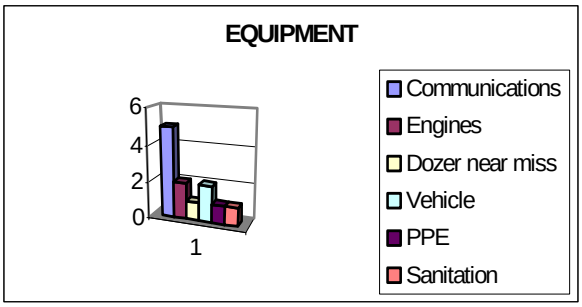
EQUIPMENT - 12



- 4 communications equipment
- 1 contract engines not safe
- 1 dozer nearly ran over sleeping FF
- 1 engine electrical failure
- 2 dozer boss got 2x4 vehicle from ground support needed 4x4
- 1 no PPE due to no knowledge
- 1 lack of hand-washing facilities, porta-potties not maintained
- 1 not enough radios on incident to give them to drivers

OTHER - 12

- 2 pack test concerns
- 1 lack of burnout on dozer line
- 1 contaminated water given to crews
- 1 resources without quals
- 1 small arms ordnance explosion during FF
- 1 crew without crew rep for 4 shifts
- 1 hiring of unqualified crewmen on type 2 crew
- 1 no medl on fire
- 1 rx fire crew w/no ppe or knowledge of such
- 1 helispot disorganized
- 1 alcohol abuse by crew, disorderly conduct, assault

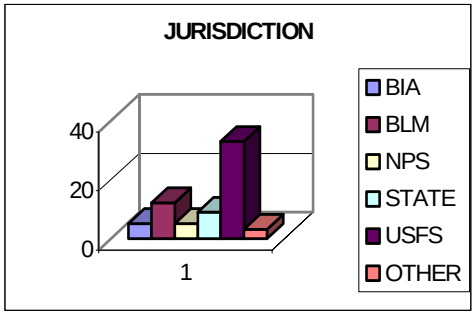
INCIDENT NAME

ABC MISC. ALTONA FIRE BASIN FIRE BOSQUE

BUCK SPRINGS	CERRO GRANDE	CLEAR CREEK	CLOVER
DEAD HORSE	DIVIDEND FIRE ICP	EMERGENCY	CLEAR CREEK
ENCAMPMENT	FALSE ALARM #3	FIRE RECON	
FIRST BOX FIRE	FLAT CREEK	GRANDDADDY	HANFORD
HAPPY	HI MEADOW	HI MEADOW-IA	IRON MINE
IRON MINE LAKE	JENNY LAKE	LOWER BELMONT	MANTER
MILE MARKER 185	MUDDY CREEK	NEW SUB 2	OLD 80 FIRE
24 COMMAND	N/A	OLD 80 FIRE	PACK TEST
POT MOUNTAIN	PRESCRIBED BURN	RANGE FIRE	RESPONDINGTO
RIVER RESCUE	SHAGGY FIRE	SOUTH CRICKET	SWEETWATER
UPPER SLIDE	YANCE CANYON	YANCE FIRE	GLADE/TETON COMP
BRANTLEY	EASTSIDE COMP	YANCE	MIDDLE FORK COMP
MONTANA FIRE	BURGDORF JUNCTION	TROY SO/FREZKAT	MONTURE/SPREAD
PLASKET 2	N/A	MIDDLE FORK	BEAVER CREEK
SULA COMP	PECHANGA	MAUDLOW/TOSTIN	OUTLET FIRE
PAULINA DUMP	CLAY CREEK II & OLD GROWTH		CLEAR CREEK

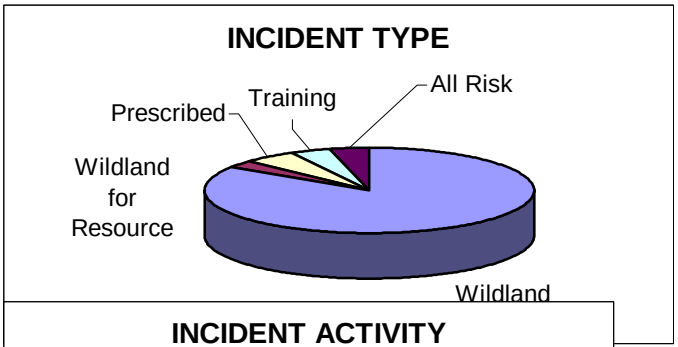
INCIDENT JURISDICTION

BIA = 5
BLM = 12
NPS = 5
State = 9
USFS = 33
Other = 3



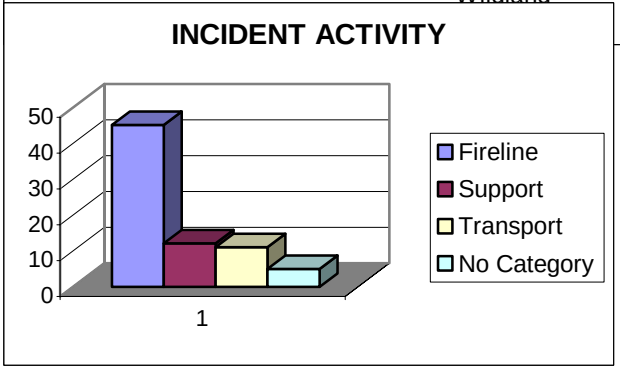
INCIDENT TYPE

Wildland = 64
For Resource Benefit = 2
Prescribed = 4
Training = 3
All Risk = 3



INCIDENT ACTIVITY

Of the SAFENETS filed, 45 occurred



on the fireline, 12 in support, 11 in transportation, and 5 in no particular category.

Fireline-45

- 21 communications issues.
- 14 command and organizational structure issues.
- 4 lack of experience
- 3 fatigue and violation of work rest ratios
- 3 violating LCES

Support = 12

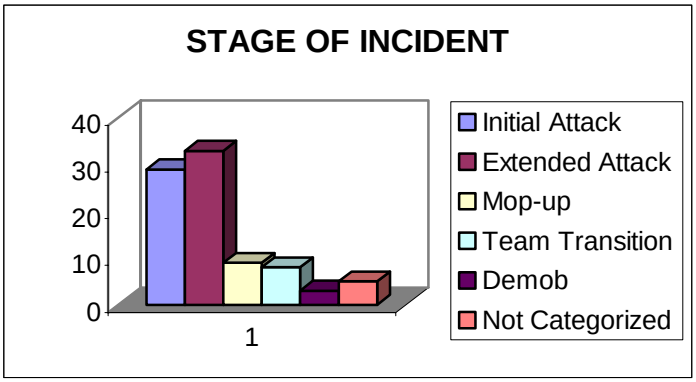
Transport = 11

No Category = 5

- 2 pack test
- 1 aerial seeding
- 1 flight following
- 1 Rx burn - shells exploding

STAGE OF INCIDENT

Initial Attack = 29
Extended Attack = 33
Mop-up = 9
Transition/Transfer of command = 8
Not Categorized = 5
Demob = 3



POSITION TITLE

The SAFENET respondents are listed by the positions they held on the fire.

Acting FMO (1)

None Given (1)

Center Manager (1)
Crew Rep (1)
Cwn Hemg (1)
District Fire Mgmt Officer (1)
Edsp/ladp (t) (1)
Engine Module (1)
Engine with Crew (1)
Fire Staff (1)
Firefighter Engine Crew Member (2)
Firefighter Engine Operator (1)
Hart-s IMT (1)
Hotshot Superintendent (2)
I C Type 4/Engine Boss (1)
Incm (1)
Observes Rx Fire Operations (1)
Sof1 (1)
Suppression Manager (1)
Training Specialist (1)
No Category (2)
Helicopter crewperson(2)
Home Unit (2)
Dozer Boss (2)
Firefighter - Fft1
EDRC
crew
Crew Boss (5)
Crew Supervisor (1)
Deputy FMO (1)
District Fire Warden (1)
Engine Boss (4)
Engine Supervisor (1)
Fire Center Manager (1)
Firefighter (5)
Firefighter Type II (1)
Ft. Apache 61 Crep (1)
Hotshot Crew Member (1)
I C (1)
IC t3 (1)
Jumper in Charge (1)
Safety Officer (2)
Strike Team Leader (1)
T1 IMT SOFR (2)
Type 2 Crew (1)
EMT(1)
ATGS
C-1 Superintendent
Strike Team Leader (T)
ENGB
Crew -Type 1

TASK

The tasks being performed by the SAFENET respondents are as follows:

Air Operation
Center Manager
Crew Safety
Direct Mobile Attack
Engine Boss
Fire Line, IA, MopUp
2 - Fire Suppression
Hose Lay and Water Support
IA Coordination
INCM
Investigation/Review
6 - Line Construction
Line Construction - IA
Line Construction - Scouting, Burnout
Line Construction - Burnout
Burn Out Island
Completion of Work Capacity Test
Current Red Card
Driving
Engine Operations
Fire Management
Hand Crew Support
IA Bucket Work
Incident Tfld
IA Coordination
Investigation/Structure Protection
2 - Line Construction - Mop Up
Line Construction - Helicopter water drops
Line Construction - Support, Mop-up, Rehab
Line Engine Support

Line Protection
2 - Mop-up
Patrol/mop-up dozer lines
Pre-positioning of Resources
Securing Line & Burnout operations
Support for Coconino NF
Training
Travel
Helibase Support
Line Construction,Air Ops
Operations Supervisor(2)
Size-up and Suppression
IA, Line Construction, chainsaw use
Transport off Helispot
Manage 97T
Packtest
Structure,Holding,Burnout,safety zone
Rehab Building Contour Structures
Staging for IA
Suppression
Transport off helispot
Ambulance Transport
ATGS
Structure Protection, Etc
Cargo section of Helibase
Camp Activities & Departure

MANAGEMENT LEVEL

Type 1 = 16
Type 2 = 16
Type 3 = 21
Type 4 = 11
Type 5 = 8