

	COMM	UNICATIONS	PLAN	
3. Radio Channels Assigned To	Function	Channel	Frequency	Syl
Command	Management	Doc 5		M
Tactical	Tactics	Doc 15		12 m
Ground to Air	Air Ops	Fire 4	- 0	
Air to Air	Pilots	119.1	~ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
			0	
4. Telephone		40	4	1
Assigned To	Landline	Cell phone	ax	Commen
		1		
		30		
	(8)	2		
	0			
6. Other (e.g. email, Began unit available phone redundancy				
FENZ SAT Phone		10000		
	(21)			
K			1	



AIR OPERATIONS PLAN

3. Personnel and	d Commu	nications				_ (
Position	ı ,	Nai	me	Affiliation	Phone	Radio Char
Air Div. Comman	nder	Steve Phill	lips	FENZ - Wellington		Fire 4
Air Attack Super	visor	Steve Phi	llips	FENZ - Wellington		Fire 4 DOC 5
Air Support Supe	rvisor				474	
Lead Helicopter	Pilot	141		Southern Helicopters	ly.	Fire 4 DOC 5
Lead Fixed-Wing	Pilot				-C.	
4. Air Resource	Assignme			100	•	
Pilot Name/ Company	Aircraf t Type	Reg or Call sign	As	signment	Tactical Freq/Chan	Telephone Numbers
- Southern Helicopters	Squirre 1 B3	IRM	Support	ground crews	Fire 4	
- Garden City		HGU			Fire 4	
5. Location of Fil	ling Point	s/Service A	reas			
Na	me	0.		Gri	d Reference	

Chatham Airport Various dipping points within fire ground

6. Safety Notes / Hazards / Radio Coverage Limitations
Power lines running East West on Owenga Road. Small Cessna fixed wing operating from airpoit from Pitt Island. Normal airport operations domestic from Tuuta airfield. 0600 thermal flight with

7. Air Operations Special Equip or Service

All Cham's staff to transfer fuel from their tanker to Helo's following CAA standards.

8. Prepared By: Steve Phillips



SAFETY PLAN

3. General Safety Points

LACES

- L Lookout(s)
- A Anchor Point(s)
- C Communication(s)
- E Escape Route(s)
- S Safety Zone(s)

Fire Orders

- Fight fire aggressively but provide for safety first.
- Initiate all action based upon current and expected fire hebaviour.
- Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood
- 5. Obtain current information on fire status.
- 6. Remain in Communication y crew members, your suppl and adjoining forces.
- Determine safety agnes and escape routes
- Establish ook ut) in potentially hazardous situations.
- Retailingontrol at all times.
- 10. Stay alart, keep calm, blearly, act decisively. alart, keep calm, think

Watch outs

- fire not scouted and sized up.
- In country not seen in beyinght, Safety zones and excap routes not identified.
- Unfamiliar with weather and local factors influencing fire buhaviour.

- Uninformed in cirategy, tactics and hazards.
 Instructions and assignments not clear.
 No originations link with crew members or our visor.
- constructing fireline without safe anchor point. Constructing fireline downhill with fire below.
- Attempting frontal assault on fire.
- 11. Unburned fuel between you and the fire.
- 12. Cannot see main fire, not in contact with anyone who can.
- 13. On hillside where rolling material can ignite fuel below.
- 14. Weather is getting hotter and drier.
- 15. Wind increases and/or changes direction.
- 16. Getting frequent spot fires across the line.
- 17. Terrain and fuels make escape to safety zones difficult.
- 18. Taking a nap near the fire line.

4. Specific Safety Points

Weather - Crew boss and pilots to monitor - Rapid changes.

Fatigue – Crew Boss to monitor with rest periods
Slips, Trips and Fats – Crew briefings, made aware of burnt small stick (punji sticks)

Air Operations Crew pre-flight briefings, pilots and Air Ops monitoring

Driving - All personnel briefed

Dust - Air Crews advised - ground crews supplied PPE and monitor

Fuels and Foam - Correct handling and storage - crews briefed

Poor communications - air ops to monitor radio, PLBs issued to crews

PLB - RCCNZ notified of Chatham Islands activity

Peat Bog - ground crews briefed and made aware of tomos

Livestock- wild bulls and pigs

Non FENZ resources - Operating on the fire ground. Assistance provided, welfare monitored Off road driving (4x4 and LUV) - restricted to DOC and other qualified personnel.

Chainsaw only to be operated by unit standard qualified personnel

5. Prepared By:

Matt Abel





SECTOR ASSIGNMENT

6. Sector Supervisor	Affiliation	Phone	Radio Cho
Steve Joyce	FENZ	100000	DOCS

7. Resource Allocation

Sector Crew / Resource		Leader (s)	# Persons			
A			Cold I			
В			Y-			
С	DOC crew	4	4.			
D		6.0	7:			
S	Hutt	Jason Sarich	5			
Υ		- (2)				
Z		- A				
		(C)				

8. Sector Assignment / Special Instructions

ALL sectors

- Dig out hot areas to cold earth and it available mix with water by poking nozzle right into the ground.
- Continuation of extinguishment of all hot spots to a width of 30m from perimeter containment
- Establish and GPS drop points
- Develop and flag ground access
- · Maintain reporting schedules, on commencement of work and twice during each day.
- Re-deployment to other sectors determined by fire behaviour
- Use helicopter for water if necessary
- Use helicopter to recon fire line.
- The trial camera flightDoc crew on Charlie to prep landing site, GPS location and cut access frack/escape route to fire edge.
- Move repeater-

9. Communications Operations Manager.		Phone	Radio Ch
operations Manager.	Steve Joyce		DOC 5
Air Attack Supervisor	Steve Phillips		Fire 4
Safety Officer	Matt Able		DOC5
10. Prepared By:	Steve Joyce		



SECTOR ASSIGNMENT

3. Sector	4. Description	5. Division Assigned
	Incident Within Incident Response Plan	Safety

Matt Abel

7. Resources Assigned	inis period		Transport Dopp	off Pickup
Resource/Crew	Leader	# Persons	Required Color	time Point/time
Air Ops	Steve Phillips	1 x B3 Squirrel 1 x BK	Ô	
Ground Crews	Steve Joyce	2 x 5-man crew		
Waitangi Fire Brigade	Steve Joyce	2 x Appliances	4,	

8. Sector Assignment / Special Instructions

Injury Accident Contingency

- Provide First Aid
- Pass Priority message re
- Senior person "ON SC sumes responsibility for the "New" incident
- of secondary incident.
- Most appropriate Senior person "OFF SCENE" assumes responsibility for the
- Most appropriate Center police.
 "Existing" incident
 Formal K45 retenting sector command at conclusion of "New' incident and resumption of normal operations.

 Aircraft incident Contingency
 Second aircraft immediately tracks to "Last Known Location" Confirm status and

- of effected aircraft.
- Sessary, Pass Priority Massage before landing to render immediate sistance or diverting to pick up nearest Fire Crew resources and returning to
- Advice Incident Controller of aircraft incident.

Sector Communications		Phone	Radio Ch
Operations Manager	Steve Joyce		DOC5
Air Attack Supervisor	Steve Phillips		Fire 4
Safety Officer	Matt Abel		DOC5
10. Prepared By:	Matt Abei		





8. Reviewed by Incident

Controller:

MEDICAL PLAN

3. First Aid Station		Phone/Rad	io	Paramedics		
Name	Location	Channel		available at Station		
Point 106	Staging	DOC 5	First	First Aiders		
Crew Leaders	Alpha Sector	DOC 5	First	Aiders	- 7	
					05	
4. Transportation	Addre				ramedics	
Ambulance Service Air Operations	Ť	Channel	ava	Hablesvich	Ambulance	
(Emergency Evac only)				.0.		
St John Ambulance	1 Hospital Road	EL LE	Yes	-		
WestPac Rescue		and the same of th	Yes			
Life Flight			3			
		6.7				
5. Hospitals	•	10	Travel T	ime B	urn	
Heli		.c.(O)				
· · · · · · · · · · · · · · · · · · ·	A Comment	Phone Roa	d Air	Unit No	Pad	
'natham's I I Hos	spital Road	20 mir	1	MO	No	
	Or i					
Medical Centre						
Medical Centre 6. Special Emergency Pro	cedures					
Medical Centre 6. Special Emergency Pro Medical Centre utilised to	stacilise patients					
Medical Centre 6. Special Emergency Pro Medical Centre utilised to	stabilise patients					
Medical Centre 6. Special Emergency Pro Medical Centre utilised to	stabilise patients					
Medical Centre 6. Special Emergency Pro Medical Centre utilised to	stabilise patients Nyellington For Aircraft Movem	ents		Manager		
Medical Centre 6. Special Emergency Pro Medical Centre utilised to Life Flight dispatched from Check with Chatham's Air	stabilise patients Nyellington For Aircraft Movem	ents		Manager		
Medical Centre 6. Special Emergency Pro Medical Centre utilised to Life Flight dispatched from Check with Chatham's Air	stabilise patients Nyellington For Aircraft Movem	ents		Manager		
Medical Centre 6. Special Emergency Pro Medical Centre utilised to Life Flight dispatched from Check with Chatham's Air	stabilise patients Nyellington For Aircraft Movem	ents		Manager		

Craig Cottrill





WEATHER AND FIRE BEHAVIOUR PREDICTION

		Temp	RH	Rain mm	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 75%cured m/hr	Scrub EROS m/hr
Tuesday	13/02	23	80	5	30	NNW	52	0	Negligible	Negligible
Wednesday	14/02	20	65	0	20	W to SW	75	2	50	400
Thursday	15/02	20	65	0	20	SE	82	4	150	1000 E

Prepared By:

Updated forecast - 12 February 4:30 pm NZDT

Tuesday (midnight to midnight):

- NNW wind becoming WNW to NW in the afternoon. Sustained winds 20-30 km/h, increasing to 25-35 near midday, then easing to near 20 km/h after 6 mm. Gusts up to 45 km/h, then decreasing quickly after 6 pm. Thereafter, sustained wind tending W through to midnight and easing to 20 km/h or less.
- Morning minimum temperature near 18-9 degrees, increasing to near 24 degrees in the
 afternoon.
- Morning relative humidity near 1009, falling to 85% in the afternoon.
- Showers likely, mainly through to about sunrise. Rainfall of 10 mm or less (mainly before 6 am).

Wednesday (midnight to gridnight):

- Wind veering with time going from west near midnight to south near midday to east by/after 6 pm, sustained at 30 km/h or less.
- Merning minimum temperature near 16-17 degrees, increasing to 21-22 degrees in the afternoon.
- . Morning relative humidity near 100%, falling to 80% in the afternoon.

No rainfall expected.

Thursday Outlook:

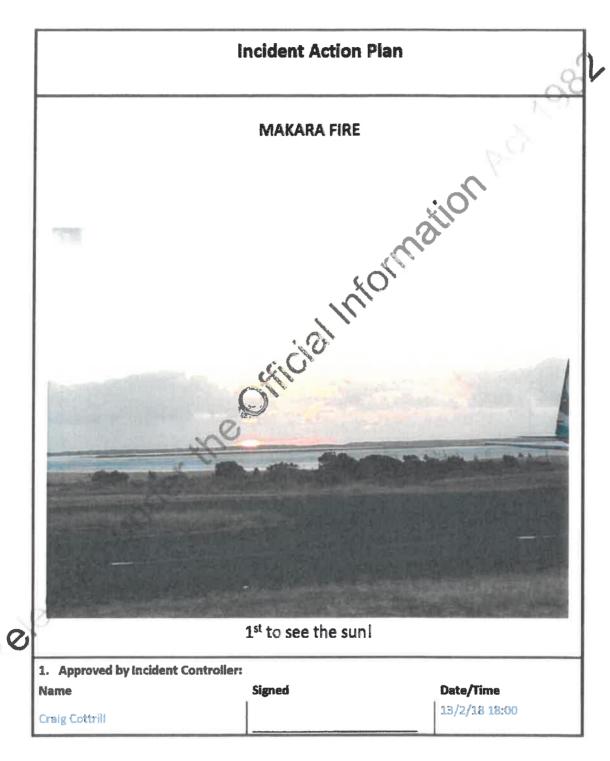
- Wind east to southeast, sustained at 10-25 km/h.
- Morning minimum temperature near 16 degrees, increasing to 21 degrees in the afternoon.
- Morning relative humidity near 100%, falling to 80% in the afternoon.
- No rainfall expected.



LOG				
Time.	Action			
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-21				

Relea







SITUATION REPORT

3. Location

South Western end Chatham Island

4. Vegetation

Tarehinau Scrub / peat /

5. NZTM Grid Ref.

6. Assessment

Vegetation in Tarahinau scrub (Dracophyllum) fuels with areas of Peat, started on the 1st Feb and ran until rain stopped the spread of fire late on the night of the 2nd burning a total of around 2440ha, destroying two structures (huts) and burning up to another, both near the southern coastal end of the fire-ground. No further fire spread was experienced during Saturday Sunday. Small flare ups near the perimeter are common, these are easily contained by helicopters. Thermal camera flights are still identifying numerous small hot spots on or near the perimeter in most sectors.

Low visibility yesterday kept the crews off the fireground. 38mm of rain in the past 72 hours.

7. Action taken

Public was evacuated from Waitangi Wharf Owenga Road as a precaution on the evening of 2nd Feb. and were allowed back into the area the following day once rain moderated fire behaviour. Feb, and were allowed back into the area the following day of co

Local machinery has mulched fuel breaks in Sector Zulu Sieria, for protection of structures.

Two medium helicopters are continuing to support of d crews with transport and bucket work. Ground crews are focusing on blacking out to 30m/ the perimeter. All tracks have been marked and helipads cut.

The first Incident Management Team for ved midday on the 3rd Feb and transitioned on the 10th, 2nd IMT is in place until about

Crew stood down due to bad weather for the second day on 13th February.

8. Factors

Access around fire-ground difficult due to risk of peat Tomo's meaning access restricted to tracks with assistance of local guides.

Obtaining resources that are not available on the island will take 2-4 days to arrive. Weather – See separate weather / fire behaviour predictions at back of IAP.

Thermal image camera monitoring has revealed a much higher number of hot areas than previously estimated. This has led to a revision of the objectives especially the completion time.

9. Predicted Incident Development

There is a high degree of confidence that further fire spread will be prevented and the objectives below will be achieved.

Possible cyclone approaching the Chathams next week.

10. Prepared by:





INCIDENT OBJECTIVES AND STRATEGIES

3. INCIDENT OBJECTIVE(S)/AIM MISSION: (SMART, Specific, Measureable, Achievable Relevant, Time bound)

Ensure safety of all responders

Protect life of residents

Minimise loss of property (especially properties along Waitangi Wharf Owenga Road)
Minimise loss of other values. (especially Taiko Trust Ecological area, and Tuuta/Rangaika Reserve)

Specific objectives

To secure the entire perimeter (estimated 50km long) by extinguishing all burning material within 30m of perimeter by the 28th February

Then patrol on days of elevated fire danger, until significant rain reduces drought codes.

4. STRATEGY/ STRATEGIES: (Plan of Action to meet Incident Objectives)

Treatment of all burning material within 30m of perimeter will be achieved by

- •Targeted extinguishment of all burning material within 30m of perimeter, detected from a helicopter or thermal camera in areas where carriepy does not obscure view of the ground and
- •Cold trail and black out perimeter to a white 50m in areas where the canopy obscures the view of the ground from the air.

Retain at least one aircraft until perimeter is secure

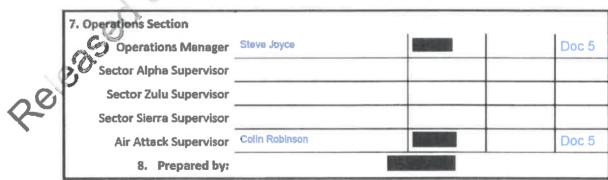
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5. Perpared by:



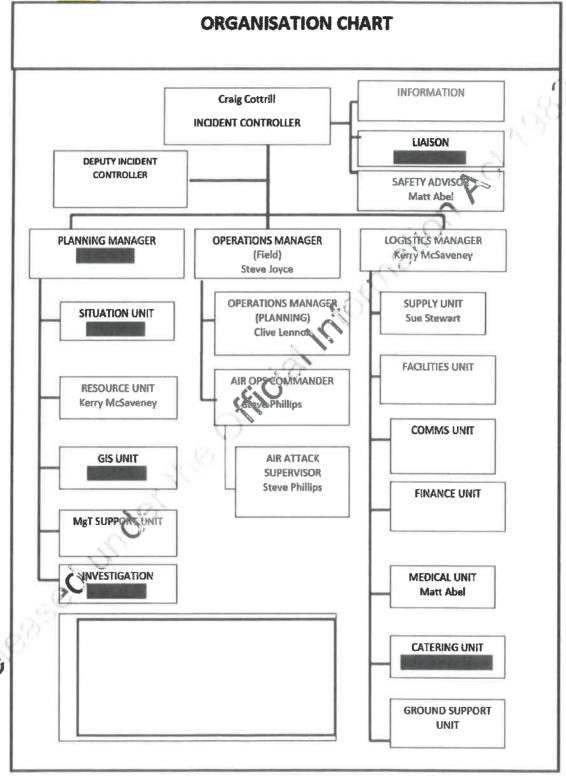


ORGANISATION LIST					
3. Incident Control		Phone	Cell Phone Radi	o Ch	
Incident Controller	Craig Cottrill	104511		Doc 5	
Safety Officer	Matt Able	2000	1	Doc 8	
Liaison Officer	AN INSE		0	Dec 5	
4. Agency Representation	/e	Phone	Cell Phone Radi	o Ch	
Lead Agency	FENZ	1.00	20	Doc 5	
Agency	Chatham Islands Council		~		
Agency	Enterprise Trust				
5. Planning/Intel Section		Phone	Cell Phone	Radio Ch	
Planning/Intel Manager	The state of the s			Doc 5	
Situations Unit	11,				
Resources Unit	Kerry McSaveney	BIE	<u> </u>	Doc 5	
6. Logistics Section	.c.Cl	Phone	Cell Phone	£	
Logistics Manager	Kerry McSaveney		-	Doc 5	
Supply Unit	Sue Siewari (NZ based)		12115		
Catering Unit			-	-	
Facilities Unit	<u></u>				
Finance Doit					
Communications Unit	Kerry McSaveney				
Medical Unit	Matt Able	100		Doc 5	











		UNICATIONS		
3. Radio Channels Assigned To	Function	Channel	Frequency	System
Command	Management	Doc 5		1/2
Tactical	Tactics	Doc 15		
Ground to Air	Air Ops	Fire 4	_0	
Air to Air	Pilots	119.1	10,	
			-0	
4. Telephone Assigned To	Landline	Cell phone	Sx (Comments
	1 1	1	1	
_		20		
	3			
6. Other (e.g. email,	Sat phone, etc.)			
6. Other (e.g. email,	Sat phone, etc.)			





Position Name Affiliation Phone Air Div. Commander Steve Phillips FENZ - Wellington Air Attack Supervisor Steve Phillips FENZ - Wellington Air Support Supervisor Lead Helicopter Pilot Southern Helicopters Lead Fixed-Wing Pilot 4. Air Resource Assignments Reg or Tactica Pilot Name/ Aircraf Call sign Assignment	Fire 4 DOC 5 Fire 4 DOC 5
Air Support Supervisor Lead Helicopter Pilot Lead Fixed-Wing Pilot 4. Air Resource Assignments Reg or Wellington Southern Helicopters Tactics	Fire 4
Lead Helicopter Pilot Lead Fixed-Wing Pilot 4. Air Resource Assignments Reg or Tactics	
Lead Fixed-Wing Pilot 4. Air Resource Assignments Reg or Tactics	
4. Air Resource Assignments Reg or Tactics	DOC 5
Reg or \$ Tactica	
Helicopters I 83 BK117 HGU Fire 4 S. Location of Filting Points/Service Areas	
Name Grid Reference Chatham Airport Various dipping points within fire ground	
Safety Notes / Hazards / Radio Coverage Limitations Power lines rupting East West on Owenga Road. Small Cessna from airport trace Pitt Island. Normal airport operations domestic 0600 thermial hight with 7. Air Operations Special Equip or Service All Chatigan's staff to transfer fuel from their tanker to Helo's following	fixed wing from Tuuta



SAFETY PLAN

3. General Safety Points

LACES

- L Lookout(s)
- A Anchor Point(s)
- C Communication(s)
- E Escape Route(s)
- 5 Safety Zone(s)

Fire Orders

- 1. Fight fire aggressively but provide for safety first.
- Initiate all action based upon current and expected fire behaviour.
- Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood
- Obtain current information on
- Remain in Communication wit crew members, your supervisor and adjoining forces.
- Determine safety to en and escape routes.
- Establish kookouts in potentially hazardous situations.
- 9. Retain control at all times.
 10. Star a har, keep calm, think
 \$\frac{1}{2}\text{learly, act decisively.}
 \$\frac{1}{2}\text{learly}. t, keep calm, think

Watch outs

- Fire not scouted and sizes
- In country not seen in dadigite
- Safety zones and escipe bottes not identified. Unfamiliar with heather and local factors influencing fire behaviour.
- Uninformed on strategy, tactics and hazards. Instructions and assignments not clear.
- No communications link with crew members or
- Lonstructing fireline without safe anchor point, constructing fireline downhill with fire below. Attempting frontal assault on fire.
- Unburned fuel between you and the fire.
- 12. Cannot see main fire, not in contact with anyone who can
- 13. On hillside where rolling material can ignite fuel below.
- 14. Weather is getting hotter and drier.
- 15. Wind increases and/or changes direction.
- 16. Getting frequent spot fires across the line.
- 17. Terrain and fuels make escape to safety zones
- 18. Taking a nap near the fire line.

4. Specific Safety Points

Weather - Crew boss pilots to monitor - Rapid changes.

Fatigue – Crew Boss to monitor with rest periods
Slips, Trips and Talic – Crew briefings, made aware of burnt small stick (punji sticks)

Air Operations - Crew pre-flight briefings, pilots and Air Ops monitoring

Driving - All personnel briefed

Air Clews advised – ground crews supplied PPE and monitor

Fuels and Foam - Correct handling and storage - crews briefed

mmunications - air ops to monitor radio, PLBs issued to crews

RCCNZ notified of Chatham Islands activity

Beat Bog - ground crews briefed and made aware of tomos

Livestock- wild bulls and pigs

Non FENZ resources - Operating on the fire ground. Assistance provided, welfare monitored Off road driving (4x4 and LUV) - restricted to DOC and other qualified personnel.

Chainsaw only to be operated by unit standard qualified personnel

5. Prepared By:

Matt Abel





SECTOR ASSIGNMENT 6. Sector Supervisor Phone **Affiliation** Radio Ch Steve Joyce **FENZ** 7. Resource Allocation Sector Crew / Resource Leader (s) # Persons В C D Hutt and Doc crew. Jason Sarich 5 + 48. Sector Assignment / Special Instructions **ALL** sectors . Dig out hot areas to cold earth and if available mix with water by poking nozzle right into the ground. Continuation of extinguishme hot spots to a width of 30m from perimeter containment · Establish and GPS dro Develop and flag ground access Maintain reporting schadules, on commencement of work and twice during each day. Re-deployment to other sectors determined by fire behaviour Use helicopter for water if necessary Use helicopter to recon fire line Thermal camera flight-Move repeater

9. Sector Communications		Phone	Radio Ch
Operations Manager.			DOC 5
Attack Supervisor	Steve Phillips		Fire 4
Safety Officer	Matt Able		DOC5
10. Prepared By:	Steve Joyce		



SECTOR ASSIGNMENT

3. Sector	4. Description	5. Division Assigned
	Incident Within Incident Response Plan	Safety

FENZ Matt Abel

7. Resources Assigned t	7. Resources Assigned this period				Pickup
Resource/Crew	Leader	# Persons	Transport Required	Drep-off Point time	Point/time
Air Ops	Steve Phillips	1 x B3 Squirrel 1 x BK	29	300	
Ground Crews	Steve Joyce	2 x 5-man crew	10		
Waitangi Fire Brigade	Steve Joyce	2 x Appliances	0		

8. Sector Assignment / Special Instructions

Injury Accident Contingency

- Provide First Aid
- Pass Priority message requesting

- Senior person "ON SCENE" assumes responsibility for the "New" incident
 Advice incident Controller of secondary incident.
 Most appropriate Senior person "OFF SCENE" assumes responsibility for the
- "Existing" incident
 Formal K45 returning sector command at conclusion of "New' incident and resumption of normal operations.

 Alreraft incident Contingency

- reraft immediately tracks to "Last Known Location" Confirm status
- Second aircraft immediately tracks to "Last Known Location" Confirm status and location of effected aircraft.

 If necessary, Pass Priority Massage before landing to render immediate absistance or diverting to pick up nearest Fire Crew resources and returning to
- Advice Incident Controller of aircraft incident.

9. Sector Communications		Phone	Radio Ch
Sector Communications Operations Manager	Steve Joyce		DOC5
Air Attack Supervisor	Steve Phillips		Fire 4
Safety Officer	Matt Abel		DOC5
10. Prepared By:	Matt Abel		



8. Reviewed by Incident

Controller:

MEDICAL PLAN 3. First Aid Station Phone/Radio **Paramedics** Channel available at Station Name Location Point 106 DOC 5 First Aiders Staging Crew Leaders Alpha Sector DOC 5 First Alders 4. Transportation Phone/Radio . Paramedics Address Ambulance Service Channel available with Ambulance Air Operations (Emergency Evac only) St John Ambulance 1 Hospital Road Yes WestPac Rescue Yes Life Flight 5. Hospitals Travel Time Burn Heli **Hospital Name Address** Road Air Unit Pad 1 Hospital Road Chatham's 20 10 No No Medical Centre min min 6. Special Emergency Procedures Medical Centre utilised to stand e patients Life Flight dispatched from Check with Chatham's Alc for Aircraft Movements STAFF WITH KNOWN MEDICAL CONDITIONS: **Advise Logistics Manager** 7. Prepared by Logistics Manager / Safety Officer:] Matt Able

Craig Cottrill



WEATHER AND FIRE BEHAVIOUR PREDICTION										
		Temp	RH	Rain	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 75%cured m/hr	Scrub EROS m/h
Wednesday	14/02	20	80	2	20	W to S	40	1	Negligible	Negligible
Thursday	15/02	20	70	5	20	SE	50	1	Negligible	Negligible
Friday	16/02	20	65	0	20	W to NW	70	2	50	400
	Prepared	By:	17. TY	i					AC.	1

Updated forecast - 13 February 4:15 pm NZDT

Wednesday (midnight to midnight):

- Wind veering with time going from NW near midnight to S by early afternoon, then ESE after about 6 pm, sustained at 15-25 km/h. Gusts up to 35 km/h on Wednesday evening.
- Morning minimum temperature near 18 degrees increasing to 21-22 degrees in the afternoon.
- Morning relative humidity near 100% lating to 80-85% in the afternoon.
- Showers possible late in the evening hainfall less than 5 mm.
- Visibility below 1 km remains likely intil about 8-9 am, then improving. Visibility below 1 km once again possible after 8-9 pm

Thursday (midnight to midnight):

- Wind E to SE, sugarped at 15-25 km/h with gusts 35-40 km/h. Shifting to W in the evening.
- Morning minimum temperature near 16 degrees, increasing to 21 degrees in the afternoon.
- Morning relative humidity near 100%, falling to 80% in the afternoon.
- Pre-dawn showers possible, with amounts 10 mm or less.
- Principlity below 1 km possible until 7-8 am.

Finday outlook:

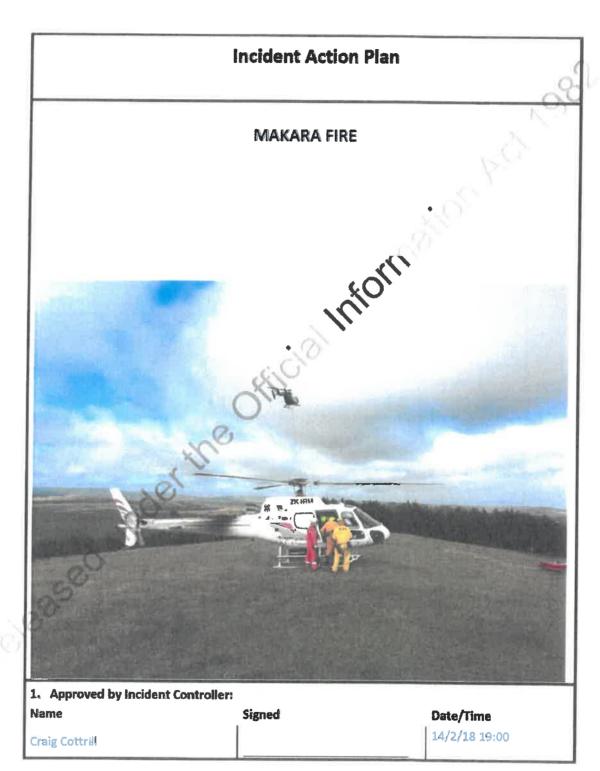
- Wind W becoming NNW in the afternoon. Sustained 15-20 km/h with gusts up to 40 km/h by the
 evening
- Morning minimum temperature near 16 degrees, increasing to 21 degrees in the afternoon.
- Morning relative humidity near 100%, falling to 80% in the afternoon.
- No rainfall expected.



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SITUATION REPORT

3. Location

4. Vegetation

5. NZTM Grid Ref.

South Western end Chatham Island

Tarehinau Scrub / peat /

6. Assessment

Vegetation in Tarahinau, (Dracophyllum) bracken and scrub fuels with areas of Peat, started on the 1st Feb and ran until rain stopped the spread of fire late on the night of the 2nd burning a total of around 2440ha, destroying two structures (huts) and burning up to another, both near the southern coastal end of the fire-ground. No further fire spread was experienced during Saturday Sunday. Small flare ups near the perimeter are common, these are easily contained by helicopters. No Thermal camera data has been gathered in he past 3 days due to bad weather Limited number of botspots are still visible on the perimeter and crews are currently cold training the edge and digging hotspots are still visible on the perimeter and crews are currently cold tr up hotspots. Smoking, 38 mm of rain earlier this week.

7. Action taken

ecaution on the evening of 2nd Public was evacuated from Waitangi Wharf Owenga Roa Feb, and were allowed back into the area the following of nce rain moderated fire behaviour.

Local machinery has mulched fuel breaks in S Julu/Sierra, for protection of structures.

ound crews with transport and bucket work. Two medium helicopters are continuing to from the perimeter. All tracks have been marked Ground crews are focusing on blacking of and helipads cut.

NZ arrived midday on the 3rd Feb and transitioned on The first Incident Management Team the 10th, 2nd IMT is in place until about Friday of this week.

8. Factors

difficult due to risk of peat Tomo's meaning access restricted to tracks Access around firewith assistance of lose guides.

Obtaining resources that are not available on the island will take 2-4 days to Weather – See separate weather / fire behaviour predictions at back of IAP.

that are not available on the island will take 2-4 days to arrive.

Early thermal camera monitoring revealed a much higher number of hot areas than previously This led to a revision of the objectives especially the completion time.

9. Predicted Incident Development

There is a high degree of confidence that further fire spread will be prevented and the objectives below will be achieved.

Possible cyclone approaching the Chathams next week.

10. Prepared by:



INCIDENT OBJECTIVES AND STRATEGIES

3. INCIDENT OBJECTIVE(S)/AIM MISSION: (SMART, Specific, Measureable, Achievable Relevant, Time bound)
Ensure safety of all responders

Protect life of residents

Minimise loss of property (especially properties along Waitangi Wharf Owenga Road)
Minimise loss of other values. (especially Taiko Trust Ecological area, and Tuuta/Rangaika Reserve)

Specific objectives

To secure the entire perimeter (estimated 50km long) by extinguishing all burning material within 30m of perimeter by the 28th February

Then patrol on days of elevated fire danger, until significant rain reduces drought codes.

4. STRATEGY/ STRATEGIES: (Plan of Action to meet incident Objectives)

Treatment of all burning material within 30m of perimeter will be achieved by:

- Targeted extinguishment of all burning material within 30m of perimeter, detected from a helicopter or thermal camera in areas where carriery does not obscure view of the ground and
- •Cold trail and black out perimeter to a width 30m in areas where the canopy obscures the view of the ground from the air.

Retain at least one aircraft until perimeter is secure.

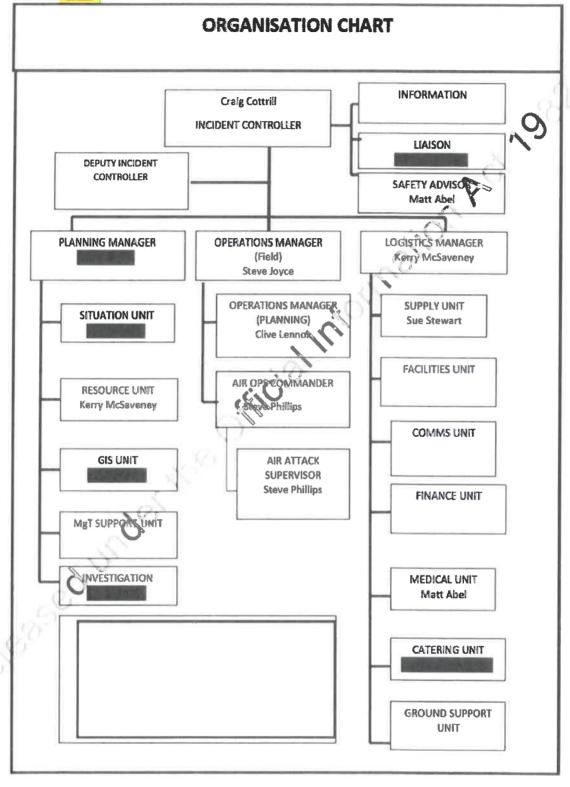
5. Perpared by:



8. Prepared by:

	ORGANISATION I	LIST		
3. Incident Control		Phone	Cell Phone Ra	dio Ch
Incident Controller	Craig Cottrill	TAR II		Fire RPT 1
Safety Officer	Matt Able	This.		Fire RPT
Liaison Officer	8707 307	12114		FIN RPT 1
4. Agency Representation	/e	Phone	Cell Phone Be	
Lead Agency	FENZ			Fire RPT 1
Agency	Chatham Islands Council	FREE	0	
Agency	Enterprise Trust	7/20	O`	
5. Planning/Intel Section		Phone	Cell Phone	Radio Ch
Planning/Intel Manager		No.		Fire RP1
Situations Unit	<u> </u>			
Resources Unit	Kerry McSaveney			Fire RP1
5. Logistics Section	0	Phone	Cell Phon	e Radio Ch
Logistics Manager	Kerry McSaveney	No. of Contract of		Fire RP1
Supply Unit	Sue Stewart (NZ based)		PANEL	1
Catering Unit	Debbie 6 / Debble K	14.179.8		
Facilities Unit				
Finance Unit		155.15	TO AVIS	1
Communication Init	Kerry McSaveney			
Medical Unit	Matt Able			Fire RP1
0,				
7. Operations Section				200
Operations Manager	Steve Joyce			Fire RP
Sector Alpha Supervisor				
Sector Zulu Supervisor		/		
Sector Sierra Supervisor				
Air Attack Supervisor	Colin Robinson	G 5 15		Fire RP







3. Radio Channels Assigned To	Function	Channel	Frequency	System
Command	Management	VHF Fire RPT 1		1
Tactical	Crew Coms	VHF Fire 1		50
Ground to Air	Air Ops	VHF Fire 4		
Air to Air	Pilots	119.1	1,0	
			0.5	
			- 61	
			. 100	
Radio channels versu Agency	Radio	Channel	100	Comments
Agency Pumicelands	Radio	CH 16	1	Comments
Agency Pumicelands DOC	Radio ICOM Base sets	CH 16	1	Comments
	Radio	CH 16	1	Comments

7. Prepared by:



AIR OPERATIONS PLAN

3. Personnel and Comm	unications			(
Position	Name	Affiliation	Phone	Radio Chan
Air Div. Commander				.0
Air Attack Supervisor	Steve Phillips	FENZ - Wellington		Fire 4 Fire RPT 1
Air Support Supervisor				De.
Lead Helicopter Pilot		Southern Helicopters	ر الم	Fire 4 Fire RPT 1
Lead Fixed-Wing Pilot			-0	
4. Air Resource Assignm	ents		1	

4. Air Resource Assignments

Pilot Name/ Company	Aircraf t Type	Reg or Call sign	Assignment (Tactical Freq/Chan	Telephone Numbers
- Southern Helicopters	Squirre 1 B3	IRM	Support ground crews	Fire 4	
- Garden City	BK117	HGU	O	Fire 4	

5. Location of Filling Points/Service Areas

Grid Reference

Chatham Airport

Various dipping points within fire ground

6. Safety Notes / Hazards / Rull Coverage Limitations

Power lines running ast West on Owenga Road. Small Cessna fixed wing operating from airport from Pitt Island. Normal airport operations domestic from Tuuta airfield.

0600 thermal font with

7. Air Operations Special Equip or Service

All Chatham's staff to transfer fuel from their tanker to Helo's following CAA standards. Landowner has confirmed no stock will be in the staging area until operations finish.

8. Prepared By: Steve Phillips



SAFETY PLAN

3. General Safety Points

LACES

- L Lookout(s)
- A Anchor Point(s)
- C Communication(s)
- E Escape Route(s)
- S Safety Zone(s)

Fire Orders

- Fight fire aggressively but provide for safety first.
- 2. Initiate all action based upon current and expected fire behaviour.
- 3. Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood
- Obtain current information on fire status
- 6. Remain in Communication with crew members, your superns and adjoining forces.
- 7. Determine safety cone and escape routes. §
- Establish lookous in potentially hazardous situations.
- 9. Retain control at all times.
 10. Stay a leaf keep calm, think
 clearly, act decisively.

Watch outst

- 1. Fire not scouted and sized up
- In country not seen in dadlight
- Safety zones and esc per outes not identified. Unfamiliar with hear har and local factors influencing fire behaviour.
 Uninformed on strategy, tactics and hazards.

- Instructions and assignments not clear.
 No communications link with crew members or SUPPLY SOL
- Constructing fireline without safe anchor point.
- Constructing fireline downhill with fire below.
- 19. Attempting frontal assault on fire
- 11. Unburned fuel between you and the fire.
- 12. Cannot see main fire, not in contact with anyone who can.
- 13. On hillside where rolling material can ignite fuel helow.
- 14. Weather is getting hotter and drier.
- 15. Wind increases and/or changes direction.
- 16. Getting frequent spot fires across the line,
- 17. Terrain and fuels make escape to safety zones difficult.
- 18. Taking a nap near the fire line.

4. Specific Safety Points 4

Weather -Air Ops, pilo and crews briefed and monitoring for rapid change.

Fatigue – Hydrate and Crew Boss to monitor, rest periods.

Slips, Trips and Cars – Crew briefed, made aware "punji sticks", cliffs, deep water and bogs.

Air Operations—Crew briefings, pilots and Air Ops monitoring Driving—All personnel briefed 60kph speed limit, stock on road.

Dust - Air Crews briefed, ground crews supplied PPE and monitor

Fuels Foam - Correct handling and storage, crews briefed. Helos now fuelling at staging Poor fammunications - Air ops to monitor radio

PLB - RCCNZ notified of Chatham Islands activity

Divestock wild bulls and pigs- Ground crews briefed

Non FENZ resources - Operating on the fire ground. Assistance provided, welfare monitored Off road driving (4x4 and LUV) - restricted to DOC and other qualified personnel.

Chainsaws- Only to be operated by unit standard qualified personnel, FULL PPE TO BE USED Hygiene- Wash hands before eating and after toilet breaks



Matt Abel





SECTOR ASSIGNMENTS

NB- All sectors on one page.

6. Operations Manager	Affiliation	Phone	Radio Ch
Steve Joyce	FENZ		Fire RPT 1

7. Resource Allocation

Sector	Crew / Resource	Leader (s)	#P@rsons
A	Hutt crew	Jason Sarich	5
В	Pumicelands	Andy Uhl	5
С	Taranaki plus Wigs	Matt Hickmott-Balks	5+1
D	Doc Crew	16/2	3
S	Monitor by helo	90	
Y	Monitor by helo		
Z	Monitor by helo		

8. Sector Assignment / Special Instructions ALL sectors

- Dig out hot areas to cold earth and ailable mix with water by poking nozzle right into the ground.
- Continuation of extinguist all hot spots to a width of 30m from perimeter containment
- Develop and flag ground access
 Maintain reporting schedules, on commencement of work and twice during each day.
- Use helicopt iter if necessary.
- Use helicopter to recon fire line.

 Delta requires wajax and 2 hose packs (Sling in). Drop off HP 2 and work hot Delta requires wajax and 2 hose packs spot holds of HP1. Dig up and drown Charlie drop into HP 4 and work south.
- Bravo drop to HP 10 and work south
- Alpha drop to SW hut or nearest drop point and work north
- Thermal camera flight-

9. Sector Communications		Phone	Radio Ch
perations Manager.	Steve Joyce		Fire RPT 1
Air Attack Supervisor	Steve Phillips		Fire 4
Safety Officer	Matt Able		Fire RPT 1
10. Prepared By:	Steve Joyce		



MEDICAL PLAN

3. First Aid Station		Phone/Radio		amedics
Name	Location	Channel	available at	Station
Point 106	Staging	Fire RPT 1	First Aiders	
Crew Leaders	Alpha Sector	Fire RPT 1	First Aiders	
	1			
4. Transportation	Addre	ess Phone/Rac		amedics
Ambulance Service	· **	Channel	available with	Maulance
Air Operations			1 3)
(Emergency Evac only)	4 Linevitei Deed	305 0035	Yes	
St John Ambulance WestPac Rescue	1 Hospital Road	303 0033	Yes	
Life Flight				
Life 1 light	1	2	0	
5. Hospitals		1	ravel Time Bu	
Heli Hospital Name		Phone Road	Air Unit	Pad
Heli Hospital Name Chatham's 1 He	Address ospital Road 305		Air Unit 10 No min	Pad No
Heli Hospital Name Chatham's 1 He Medical Centre	ospital Road 305	0035	10 No	1
Heli Hospital Name Chatham's 1 He Medical Centre	ospital Road 305 occedures o stabilise patients	0035 20 min	10 No	1
Heli Hospital Name Chatham's 1 He Medical Centre Medical Emergency Pr Medical Centre utilised to	ospital Road 305 occedures o stabilise patients	0035 20 min	10 No	1
Heli Hospital Name Chatham's 1 He Medical Centre 6. Special Emergency Pr Medical Centre utilised to Life Flight dispatched from Check with Chatham's A	ospital Road 305 occedures o stabilise pakients om Wellington Air for Aircraft Movem	0035 20 min	10 No	1
Heli Hospital Name Chatham's 1 He Medical Centre 6. Special Emergency Pr Medical Centre utilised to Life Flight dispatched from Check with Chatham's A	ospital Road 305 occedures o stabilise pakients om Wellington Air for Aircraft Movem	0035 20 min	10 No	1
Heli Hospital Name Chatham's 1 He Medical Centre 6. Special Emergency Pr Medical Centre utilised to Life Flight dispatched from Check with Chatham's A	ospital Road 305 occedures o stabilise pakients om Wellington Air for Aircraft Movem	0035 20 min	10 No	1
Heli Hospital Name Chatham's 1 He Medical Centre 6. Special Emergency Pr Medical Centre utilised to Life Flight dispatched from Check with Chatham's A	occedures o stabilise patients om Wellington Air for Aircraft Movem	0035 20 min	10 No	1





WEATHER AND FIRE BEHAVIOUR PREDICTION

		Temp	RH	Rain mm	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 75%cured m/hr	Scrub EROS m/hr
Thursday	15/02	20	70	5	20	Е	50	1	Negligible	Negligible
Friday	16/02	20	65	0	20	W to NW	70	2	50	400
Saturday	17/02	20	65	0	30	NW	82	6	300	1600 E

Prepared By: Jamie Cowan

Updated forecast - 14 February 4:15 pm NZDT

Thursday (midnight to midnight):

- Mormal Wind E to SE becoming NE after 8 pm, sustained a 13.23 km/h with gusts 35-40 km/h.
- Morning minimum temperature near 16 degrees increasing to 21 degrees in the afternoon.
- Morning relative humidity near 100%, falling to 85% in the afternoon.
- Rain or showers tapering off by about 1 am with clouds giving way to sun.

 Visibility below 5 km possible in moderate rain, although the chance for visibility to be below 1 km

Friday (midnight to midnight

- Wind W becoming (W, then N possible by evening. Sustained 15-25 km/h with gusts up to 35-40 km/h by the evening
- Morning minimum temperature near 16 degrees, increasing to 22 degrees in the afternoon.
- relative humidity near 100%, falling to 75% in the afternoon.
- wainfall expected.

Saturday outlook:

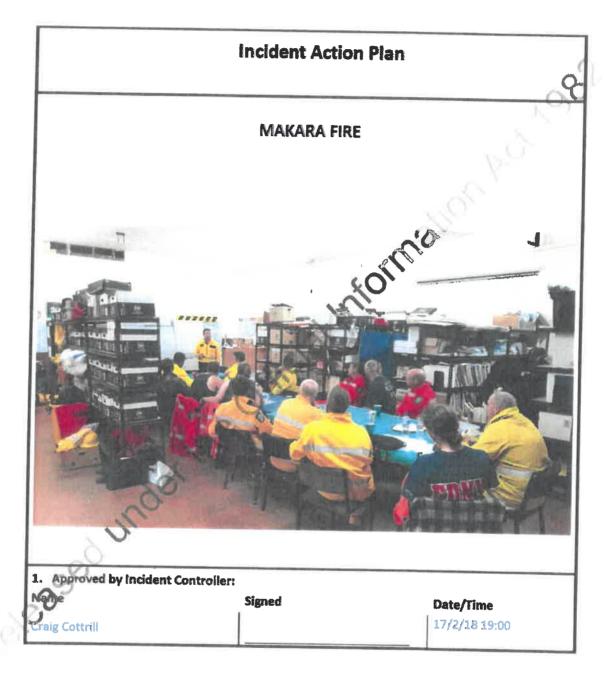
Wind N-NW and increasing. Sustained 20-25 km/h during the morning, increasing to 30-35 km/h during the afternoon. Gusts up to 50 km/h by the afternoon and evening.

- Morning minimum temperature near 18 degrees, increasing to 23 degrees in the afternoon.
- Morning relative humidity near 100%, falling to 80% in the afternoon.
- No rainfall expected during the day; slight chance for a shower at night.



Time. Action		
	76/2	
25		
	70	
	100	
3250		







SITUATION REPORT

3. Location

4. Vegetation

5. NZTM Grid Ref.

South Western end Chatham Island

Tarehinau Scrub / peat /

6. Assessment

Vegetation in Tarahinau, (Dracophyllum) bracken and scrub fuels with areas of Peat, started on the 1st Feb and ran until rain stopped the spread of fire late on the night of the 2nd burning a total of around 2440ha, destroying two structures (huts) and burning up to another, both near the southern coastal end of the fire-ground. No further fire spread was experienced during Saturday Sunday. Small flare ups near the perimeter are common, these are easily contained by helicopters. Thermal camera data was gathered yesterday, limited number of hotspots are still visible on the perimeter and crews are currently cold trailing the edge and digging up hotspots. 50 kpm of rain has fallen so and crews are currently cold trailing the edge and digging up hotspots far this week.

7. Action taken

Public was evacuated from Waitangi Wharf Owenga Road as a precaution on the evening of 2nd Feb, and were allowed back into the area the following eay once rain moderated fire behaviour.

Local machinery has mulched fuel breaks in Sector Zulu/Sierra, for protection of structures.

Two medium helicopters are continuing to support ground crews with transport and bucket work. Ground crews are focusing on blacking out to 30m from the perimeter. All tracks have been marked and helipads cut.

NZ arrived midday on the 3rd Feb and transitioned on The first Incident Management Tea the 10 h. The 3rd IMT started on

8. Factors

build difficult due to risk of peat Tomo's meaning access restricted to tracks Access around fire with assistance of

that are not available on the island will take 2-4 days to arrive.

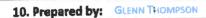
Weather - See Separate weather / fire behaviour predictions at back of IAP.

Early thermal camera monitoring revealed a much higher number of hot areas than previously estimated. This led to a revision of the objectives especially the completion time. However the latest thermal run indicated that crews had been making great progress; the completion date has not been adjusted.

9 Predicted incident Development

There is a high degree of confidence that further fire spread will be prevented and the objectives below will be achieved.

Possible cyclone approaching the Chathams next week, expecting rain, poor visibility and disruptions to flights, resource arrivals/departures.







INCIDENT OBJECTIVES AND STRATEGIES

- 3. INCIDENT OBJECTIVE(S)/AIM MISSION: (SMART, Specific, Measureable, Achievable Relevant, Time bound)
 - 1. Ensure safety of all responders
 - 2. Protect life of residents
 - 3. Minimise loss of property (especially properties along Waitangi Wharf Owenga Roa
 - 4. Minimise loss of other values. (especially Taiko Trust Ecological area, and Tuuta/R Reserve)
 - 5. To secure the entire perimeter (estimated 50km long) by extinguishing all burning material within 30m of perimeter by the 28th February

4. STRATEGY/ STRATEGIES: (Plan of Action to meet incident Objectives)

- 1. Appoint a dedicated safety officer.
- 2. Continue to liaise with all effected parties/agencie

- 3. Dedicate resources to the appropriate flank/sectorias weather dictates
 4. Treatment of all burning material within 30m of perimeter will be achieved by:

 Targeted extinguishment of all burning material within 30m of perimeter, detected from a helicopter or thermal camera in areas where canopy does not obscure view of the ground and the ground and
 - Cold trail and black out p to a width 30m in areas where the canopy obscures the view of nd from the air.
 - Monitor sectors not being patrolled by helicopter.

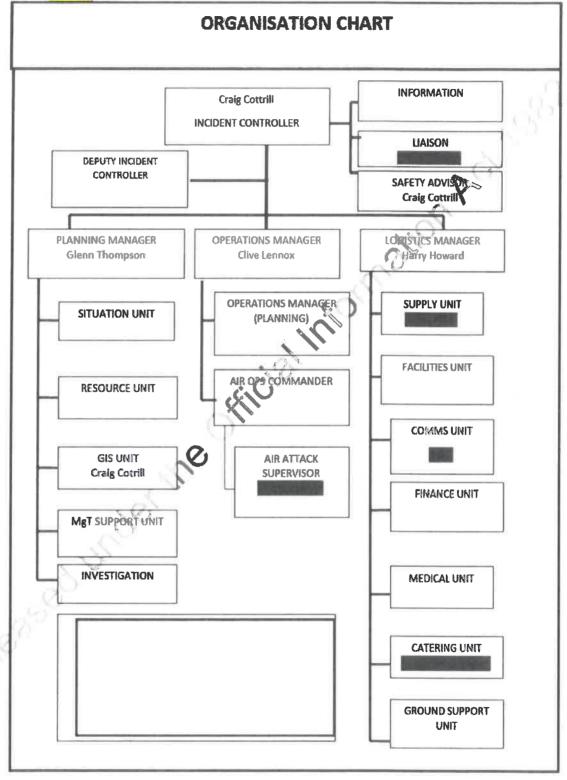
Retain at least one aircraft un meter is secure.

5. Glenn Thompson



	ORGANISATION	V LIST	
3. Incident Control		Phone	Cell Phone Radio Ch
Incident Controller	Craig Cottriii		Fire RPT 1
Safety Officer	Craig Cottrill	INSL II	Fire RPT 1
Liaison Officer	EL JA		Fine RPT 1
4. Agency Representation	/e	Phone	Cell Phone Railio Ch
Lead Agency	FENZ	100	Fire RPT 1
Agency	Chaiham Islands Council		CV.
Agency	Enterprise Trust),
5. Planning/Intel Section		Phone	Cell Phone Radio Ch
Planning/Intel Manager	Glenn Thompson		Fire RP1
Situations Unit	Ç	0	
Resources Unit	Harry Howard		Fire RP1
6. Logistics Section	0	Phone	Cell Phone Radio Ch
Logistics Manager	Harry Howard	354.340	Fire RP1
Supply Unit	Sue Stevent (NZ based)		3000
Catering Unit		TOTAL	
Facilities Unit	10		
Finance Unit			
Communications Unit			
Medical Unit			
10,	-		
7. Operations Section	ent a Lannau	1	Fire RP
Operations Manager	Clive Lennox		1
Sector Alpha Supervisor			
Sector Zulu Supervisor			
Sector Sierra Supervisor			
Air Attack Supervisor	1.0126		Fire RP
8. Prepared by:	Glenn Thompson	•	







3. Radio Channels Assigned To	Function	Channel	Frequency	Sy
Command	Management	VHF Fire RPT 1		
Tactical	Crew Coms	VHF Fire 1	-	
Ground to Air	Air Ops	VHF Fire 4		À
Air to Air	Pilots	119.1	.0.	
			_0	
	us frequency for VHF	Fire RPT 1	,	_
Agency Pumicelands	Radio	Channel CH 16	1	Comme
DOC	Base sets	Ch 30		
FENZ	DUAL Band	Zona A CH 15		
FEIVE	DOAL Band	Zoniezi Ch 13		
6. Other (e.g. email,	Sat phone, etd)			
	0.1			
	300			
	4			
7. Prepared by:	175	Harry Howard		



AIR OPERATIONS PLAN

3. Personnel and Communic Position	ations Name	Affiliation	Phone	Radio Cha
Air Div. Commander				
Air Attack Supervisor		GRWC		Fire 4 Fire RPT 1
Air Support Supervisor				7
Lead Helicopter Pilot		Southern Helicopters	0	Fire 4 Fire RPT 1
Lead Fixed-Wing Pilot			0	
4. Air Resource Assignments		.<	6	
Pilot Name/ Aircraf Company t Type	Reg or Call sign	Assignmen	Freq/Chan	Telephone Numbers
	RM Suppo	ort ground crews	VHF Fire 4	

5. Location of Filling Points/Service Areas

1 B3

BK117

Name

Grid Reference

VHF Fire 4

Staging Area

Helicopters

Garden City

Various dipping points within fire ground

6. Safety Notes / Hazards / Radio Coverage Limitations

HGU

Power lines runking East West on Owenga Road. Small Cessna fixed wing operating from airport operations domestic from Tuuta airfield. 0600 themal flight with

7. Air Operations Special Equip or Service

All Chatham's staff to transfer fuel from their tanker to Helo's following CAA standards. Land the has confirmed no stock will be in the staging area until operations finish.

C. Prepared By:





SAFETY PLAN

3. General Safety Points

LACES

L - Lookout(s)

- A Anchor Point(s)
- C Communication(s)
- E Escape Route(s)
- S Safety Zone(s)

Fire Orders

- 1. Fight fire aggressively but provide for safety first.
- Initiate all action based upon current and expected fire. hehaviour.
- 3. Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood.
- Obtain current information on fire status.
- Remain in Communication with crew members, your super and adjoining forces.
- Determine safe() zones and escape routes
- Establish took out in potentially hazardour situations.
- Retainsontrol at all times.
- 10. Stev dient, keep calm,

Watch outs

- Fire not scouted and sized up.
- In country not seen in a villent.
 Safety zones and except routes not identified.
- Unfamiliar with swapmer and local factors influencing fin behaviour.

- Uninformed in strategy, tactics and hazards.
 Instructions and assignments not clear.
 No communications link with crew members or
- contructing fireline without safe anchor point. Constructing fireline downhill with fire below. Attempting frontal assault on fire.
- 11 Unburned fuel between you and the fire
- 12. Cannot see main fire, not in contact with anyone who can.
- 13. On hillside where rolling material can ignite fuel below.
- 14. Weather is getting hotter and drier.
- 15. Wind increases and/or changes direction.
- 16. Getting frequent spot fires across the line.
- 17. Terrain and fuels make escape to safety zones difficult
- 18. Taking a nap near the fire line.

4. Specific Safety Points

Weather -Air Ops, of Os and crews briefed and monitoring for rapid change. Fatigue - Hydrate and Crew Boss to monitor, rest periods.

Fatigue – Hydrate and Crew Boss to monitor, rest periods.

Slips, Trips and Fals – Crew briefed, made aware "punji sticks", cliffs, deep water and bogs.

Air Operations Crew briefings, pilots and Air Ops monitoring

Air Operations

Driving - All personnel briefed 60kph speed limit, stock on road.

Dust - Air prews briefed, ground crews supplied PPE and monitor

Fuels and Foam - Correct handling and storage, crews briefed. Helos now fuelling at staging Poor communications - Air ops to monitor radio

RLB - RCCNZ notified of Chatham Islands activity

Livestock wild bulls and pigs- Ground crews briefed

Non FENZ resources - Operating on the fire ground. Assistance provided, welfare monitored Off road driving (4x4 and LUV) - restricted to DOC and other qualified personnel.

Chainsaws- Only to be operated by unit standard qualified personnel, FULL PPE TO BE USED Hygiene- Wash hands before eating and after toilet breaks

5. Prepared By:

Craig Cottrill





SECTOR ASSIGNMENTS

NB- All sectors on one page.

6. Operations Manager	Affiliation	Phone	Radio Ci
Steve Joyce	FENZ		Fixe RPT 1

Sector	Crew / Resource	Leader (s)	# Persons
Ą	Monitor by helo		1
3	Monitor by helo	n ^d	1
5	Taranaki		5
)	Monitor by helo	7/2	
3	Wellington		5
<	Pumiclands		5
7	Monitor by helo		
		(.(3)	

8. Sector Assignment / Special Instructions

ÄLL sectors

- Dig out hot areas to cold earth and areas. if available mix with water by poking nozzle right into the ground.
- of all hot spots to a width of 30m from perimeter Continuation of extinguish containment
- Develop and flag ground
- Maintain reporting schedules, on commencement of work and twice during each day.
- Use helicopter for water if necessary.
- Use helicopter to recon fire line.

 X-Ray requires wajax and 2 hose packs (Sling in). Drop off HP and work hot spot lingup and drown

4	D	

9. Sector Combonications		Phone	Radio Ch
Operations Manager.	Clive Lennox		Fire RPT 1
Air Attack Supervisor	alizaja (Sie Sid)		Fire 4
Safety Officer	Craig Cottrill		Fire RPT 1
10. Prepared Ry	Clive Lennox		



MEDICAL PLAN

3. First Aid Station Name	Location	Phone/Radio Channel		Paramedics le at Station
Point 106	Staging	Fire RPT 1	First Aiders	
Crew Leaders	Various sectors	Fire RPT 1	First Aiders	
Ambulance Service Air Operations Emergency Evac or		ess Phone/Rac Channel		Paramedics vith Ambulance
St John Ambulance	1 Hospital Road	(SUMA)	Yes	-
WestPac Rescue			Yes	
_ife Flight				
5. Hospitals		1/1	avel Time	Burn
	Address	Phone Road	Air Un	it Pad
Hospital Name Chatham's Medical Centre	1 Hospital Road	Phone Road 20 min	Air Uni 10 N min	3
Hospital Name Chatham's Medical Centre 5. Special Emergency Medical Centre utilise Life Flight dispatched Check with Chatham	Procedures ed to stabilise patients d from Wellington 's Air far Aberraft Movem	20 min	10 N	o No
Chatham's Medical Centre 6. Special Emergency Medical Centre utilise Life Flight dispatched	Procedures ed to stabilisé patients d from Wellington 's Air factableraft Moven IN-MEDICAL CONDITIO	nents ONS: Advise Lo	10 Nomin	o No



WEATHER AND FIRE BEHAVIOUR PREDICTION

		Temp	RH	Rain mm	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 75%cured m/hr	Scrub EROS mhr
Saturday	17/02	20	80	0	30	NW	67	3	70	500 E
Sunday	18/02	20	80	0	20	NW	76	3	70	500 E
Monday	19/02	20	80	0	25	NW	80	3	95	700 E

Prepared By: Glenn Thompson

Updated forecast - 16 February 1530 NZDT

Friday (through to midnight):

- Wind N to NW sustained 15-30 km/h, with gusts to 36 km/h possible.
- Temperature decreasing to near 17°C by midnights
- · Humidity increasing to near 100% before midnight
- No rainfall expected.
- Chance for visibility below 1 km increasing after 10 pm.

Saturday (midnight to midnight):

- Wind NNW to NW and increasing Sustained 15-25 km/h during the morning, increasing to 25-35 km/h during the afternoon. Gusts up to 50 km/h by the afternoon and evening.
- Morning minimum temperature near 17°C, increasing to 23°C in the afternoon.
- Morning relative humidity near 100%, falling to 80% in the afternoon.
- No rainfall expected during the day; slight chance for a shower at night.
- Chance for visitality below 1 km through 8-9 am.

Sunday (midnight to midnight):

- With NW wind before sunrise becoming variable for a time after sunrise, then tending N to in the afternoon. Sustained wind increasing to 20 km/h in the morning, increasing to -25 km/h thereafter. Gusts up to 40 km/h possible in the afternoon and evening. Morning minimum temperature near 18°C, increasing to 23-23°C in the afternoon.
- Morning relative humidity near 100%, falling to near 85% in the afternoon.
- Slight chance for a morning shower; otherwise, no rainfall expected.

Monday (outlook):

- NW wind 20-25 km/h during the morning increasing to 25-35 km/h during the afternoon and evening. Gusts up to 50 km/h possible in the afternoon and evening.
- Morning minimum temperature near 18°C, increasing to 22-23°C in the afternoon.



Rain from (ex) Tropical Cyclone will most likely begin late Monday night or early Tuesday and pea



	LOG	
Time.	Action	
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25		



Incident Action Plan

MAKARA FIRE



1. Approved by Incident Controller:

Signed Name

Date/Time 17/2/18 19:00

Craig Cottrill



SITUATION REPORT

3. Location

1

4. Vegetation

5. NZTM Grid Ref.

South Western end Chatham Island

Tarehinau Scrub / peat /

6. Assessment

Vegetation in Tarahinau, (Dracophyllum) bracken and scrub fuels with areas of Peat, started on the 1st Feb and ran until rain stopped the spread of fire late on the night of the 2nd burning a total of around 2440ha, destroying two structures (huts) and burning up to another, both neat, the southern coastal end of the fire-ground. No further fire spread was experienced during Saturday Sunday. Small flare ups near the perimeter are common, these are easily contained by helicopters. Thermal camera data was gathered yesterday, limited number of hotspots are still visible on the perimeter and crews are currently cold trailing the edge and digging up hotspots. 50 mm of rain has fallen so far this week.

7. Action taken

Public was evacuated from Waitangi Wharf Owenga Road as a precaution on the evening of 2nd Feb, and were allowed back into the area the following day once rain moderated fire behaviour.

Local machinery has mulched fuel breaks in Sector Zulu/Sierra, for protection of structures.

Two medium helicopters are continuing to support ground crews with transport and bucket work.

Ground crews are focusing on blacking out to 30m from the perimeter. All tracks have been marked and helipads cut.

The first Incident Management Team from NZ arrived midday on the 3rd Feb and transitioned on the 10 h. The 3rd IMT started on The IAP.

8. Factors

Access around fire ground difficult due to risk of peat Tomo's meaning access restricted to tracks with assistance of local guides.

Obtaining resources that are not available on the island will take 2-4 days to arrive.

Weather - See separate weather / fire behaviour predictions at back of IAP.

Early thermal camera monitoring revealed a much higher number of hot areas than previously estimated. This led to a revision of the objectives especially the completion time. However the latest thermal run indicated that crews had been making great progress; the completion date has not been adjusted.

9 Predicted Incident Development

There is a high degree of confidence that further fire spread will be prevented and the objectives below will be achieved.

Possible cyclone approaching the Chathams next week, expecting rain, poor visibility and disruptions to flights, resource arrivals/departures.

10. Prepared by: GLENN THOMPSON





INCIDENT OBJECTIVES AND STRATEGIES

- 3. INCIDENT OBJECTIVE(S)/AIM MISSION: (SMART, Specific, Measureable, Achievable Relevant, Time bound)
 - 1. Ensure safety of all responders
 - 2. Protect life of residents
 - 3. Minimise loss of property (especially properties along Waitangi Wharf Owenga Roa
 - 4. Minimise loss of other values. (especially Taiko Trust Ecological area, and Tuuta/R Reserve)
 - 5. To secure the entire perimeter (estimated 50km long) by extinguishing all burning material within 30m of perimeter by the 28th February

4. STRATEGY/ STRATEGIES: (Plan of Action to meet incident Objectives)

- 1. Appoint a dedicated safety officer.
- 2. Continue to liaise with all effected parties/agencies
- 3. Dedicate resources to the appropriate flank/sector
- the ground and
 - Cold trail and black out pe to a width 30m in areas where the canopy d from the air. obscures the view of
 - Monitor sectors not bein atrolled by helicopter

Retain at least one aircraft until berimeter is secure.

5. Prepared by: Glenn Thompson



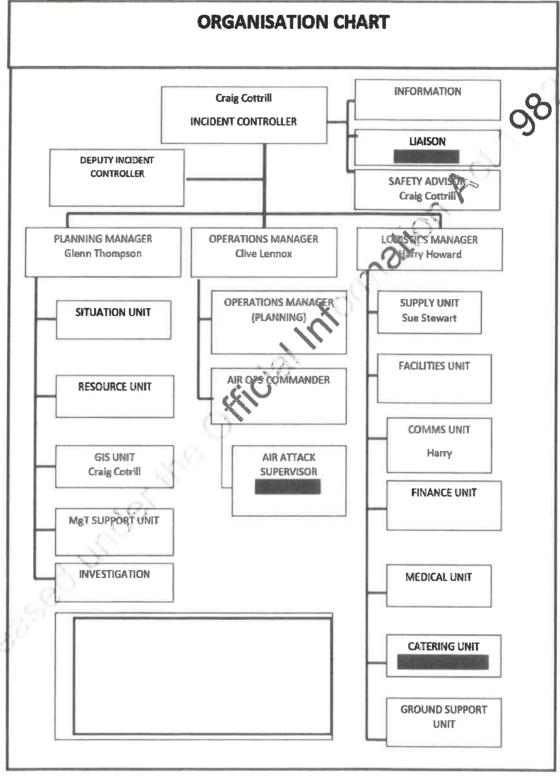


ORGANISATION LIST					
3. Incident Control		Phone	Cell Phone Rad	io Ch	
Incident Controller	Craig Cottrill	ENN		Fire RPT 1	
Safety Officer	Craig Cottrili			Fire RPT 1	
Liaison Officer	Afford Till	1313		Fine RRT 1	
4. Agency Representativ	/e	Phone	Cell Phone Ray	ijo Ch	
Lead Agency	FENZ		Do	Fire RPT 1	
Agency	Chatham Islands Council	'EULE	0		
Agency	Enterprise Trust)		
5. Planning/Intel Section		Phone	Cell Phone	Radio Ch	
Planning/Intel Manager	Glenn Thompson			Fire RPT	
Situations Unit	(0)				
Resources Unit	Harry Howard	1.00		Fire RPT	
6. Logistics Section	.0	Phone	Cell Phone	Radio Ch	
Logistics Manager	Harry Howard			Fire RPT	
Supply Unit	Sue Stewart (NZ based)		150002		
Catering Unit		TYP (S)			
Facilities Unit	10				
Finance Unit					
Communications Unit					
Medical Unit					
18					

7. 0	perations Section			
2	Operations Manager	Clive Lennox		Fire RPT
0	Sector Alpha Supervisor			
ľ	Sector Zulu Supervisor			
	Sector Sierra Supervisor			
	Air Attack Supervisor		District Co.	Fire RPT
	8. Prepared by:	Glenn Thompson		









3. Radio Channels				
Assigned To	Function	Channel	Frequency	S
Command	Management	VHF Fire RPT 1		1
Tactical	Crew Coms	VHF Fire 1		1
Ground to Air	Air Ops	VHF Fire 4	0	
Air to Air	Pilots	119.1	20	
			100	
			0	
Radio channels versus Agency Pumicelands	s frequency for VHF Radio	Channel CH 16		Comme
DOC	Base sets	Ch 3p		
FENZ	DUAL Band	Zona A CH 15		
	7.5	1		
7. Prepared by:		larry Howard		



AIR OPERATIONS PLAN

BK117 HGU VHF Fire 4 Location of Filling Points/Service Areas Name Grid Reference	Positio	id Commu n		me	Affiliation	Phone	Radio Chan
Air Support Supervisor Lead Helicopter Pilot Lead Fixed-Wing Pilot	Air Div. Comma	nder					S
Lead Fixed-Wing Pilot L. Air Resource Assignments Reg or Pilot Name/ Aircraf Call sign Assignment Freq/Chan Numbers Southern I B3 HGU Support groundscrews VHF Fire 4 Call sign Assignment Freq/Chan Numbers Southern I B3 HGU Support groundscrews VHF Fire 4 VHF Fire 4 Call sign Assignment Freq/Chan Numbers Company t Tactical Freq/Chan Numbers Company t Tope Southern I B3 HGU Support groundscrews VHF Fire 4 VHF Fire 4 Call sign Assignment Freq/Chan Numbers Company t Tope Company t To	Air Attack Supe	rvisor	37 45 W	2014	GRWC		26
Lead Fixed-Wing Pilot J. Air Resource Assignments Reg or Call sign Assignments Company t Type Squirre I B3 Helicopters BK117 HGU Location of Filling Points/Service Areas Name Helicopters Fire RPT 1 Tactical Freq/Chan Numbers VHF Fire 4 VHF Fire 4 VHF Fire 4	Air Support Sup	ervisor					
Reg or Pilot Name Aircraf Call sign Assignments Company t Type Squirre IRM Support groundscrews VHF Fire 4 I B3 BK117 HGU Location of Filling Points/Service Areas Name Grid Reference	Lead Helicopter	Pilot	45,000			262	1
Pilot Name/ Aircraf Call sign Assignment Freq/Chan Numbers Company t Type Squirre I B3 Helicopters BK117 HGU Location of Filling Points/Service Areas Name Reg or Call sign Assignment Freq/Chan Numbers Support groundecrews VHF Fire 4 VHF Fire 4 VHF Fire 4 Freq/Chan Numbers	Lead Fixed-Win	g Pilot				00	
Company t Type Southern 183 Helicopters BK117 HGU Location of Filling Points/Service Areas Name Company t Type Support ground crews VHF Fire 4 VHF Fire 4 VHF Fire 4 VHF Fire 4			Reg or				•
Squirre IRM Support ground crews VHF Fire 4 Sarden City HGU Location of Filling Points/Service Areas Name Grid Reference	•		Call sign	Assi	gnmen	Freq/Chan	Numbers
Southern Helicopters BK117 HGU VHF Fire 4 Location of Filling Points/Service Areas Name Grid Reference	Company	74.1	Turn.	To		1 14 45 pm	1
i. Location of Filling Points/Service Areas Name Grid Reference	Southern		IRM	Support gr	ounderews	VHF Fire 4	
i. Location of Filling Points/Service Areas Name Grid Reference	Helicopters	BK117	HGU			VHE Fire 4	
Name Grid Reference			1100	CO.		VIII 1110 4	
	Garden City		1				
Staging Area Various dipping points within fire ground		illing Point	s/Service/A	reas			
	. Location of F	•	0				
	5. Location of F N Staging Area 6. Safety Notes	ame / Hazards	Radio Cov	arious dippi	ng points within	fire ground	ad wing operati
Power lines runging East West on Owenga Road. Small Cessna fixed wing operation from airport (Cha Pitt Island, Normal airport operations domestic from Tuuta airfield	5. Location of F N Staging Area 6. Safety Notes Power I	/ Hazards	/ Radio Cov	arious dippi verage Limit vest on Owe	ng points within ations anga Road. Sm	fire ground	ed wing operati
from airport (6) Pitt Island. Normal airport operations domestic from Tuuta airfield 0600 themal slight with	Staging Area 6. Safety Notes Power I from air	Hazards ines runti port	/ Radio Cov ng East W Pitt Island	arious dippi verage Limit vest on Owe	ng points within ations anga Road. Sm	fire ground	ed wing operati m Tuuta airfield
from airport from Pitt Island. Normal airport operations domestic from Tuuta airfield	Staging Area 6. Safety Notes Power I from air	Hazards ines runti port	/ Radio Cov ng East W Pitt Island	arious dippi verage Limit vest on Owe	ng points within ations anga Road. Sm	fire ground	ed wing operati m Tuuta airfield
from airport Pitt Island. Normal airport operations domestic from Tuuta airfield 0600 them als light with	Staging Area 6. Safety Notes Power I from air 0600 th	Hazards ines rundi pod Ga encabligh	Radio Coving East W Pitt Island of with	various dippi verage Limit est on Owe Normal air	ng points within ations inga Road. Sm port operation	fire ground nall Cessna fix s domestic fro	m Tuuta airfield
from airport for Pitt Island. Normal airport operations domestic from Tuuta airfield 0600 themas light with	Staging Area 6. Safety Notes Power I from air 0600 th 7. Air Operation	Hazards ines runti port Con entralshigh	Radio Coving East W Pitt Island int with Equip or Ser	verage Limit verage Limit est on Owe Normal air vice from their t	ations ang Road. Sn port operation	fire ground nall Cessna fix s domestic fro	m Tuuta airfield A standards.





SAFETY PLAN

3. General Safety Points

LACES

- L Lookout(s)
- A Anchor Point(s)
- C Communication(s)
- E Escape Route(s)
- S Safety Zone(s)

Fire Orders

- 1. Fight fire aggressively but provide for safety first.
- 2. Initiate all action based upon current and expected fire behaviour.
- 3. Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and
- 5. Obtain current information on fire status
- Remain in Communication with crew members, your super and adjoining forces.
- Determine safety agrees and escape routes.
- Establish rookture in potentially hazardour situations.
- Retainsontrol at all times
- 10 gray alort, keep calm, think dearly, act decisively.

Watch out

- Fire not scouted and sized up.
- In country not seen in caylight. Safety zones and excap routes not identified.
- Unfamiliar with sventner and local factors influencing fire behaviour.

- Uninform of instrategy, tactics and hazards.
 Instructions and assignments not clear.
 No ommunications link with crew members or e visor.
- contructing fireline without safe anchor point. Constructing fireline downhill with fire below.
- Attempting frontal assault on fire. WO.
- 11. Unburned fuel between you and the fire.
- 12. Cannot see main fire, not in contact with anvone who can.
- 13. On hillside where rolling material can ignite fuel below.
- 14. Weather is getting hotter and drier.
- 15. Wind increases and/or changes direction.
- 16. Getting frequent spot fires across the line.
- 17. Terrain and fuels make escape to safety zones. difficult.
- 18. Taking a nap near the fire line.

4. Specific Safety Points

Weather -Air Ops, pilots and crews briefed and monitoring for rapid change.

Fatigue - Hydrate and Crew Boss to monitor, rest periods.

Slips, Trips and Falls - Crew briefed, made aware "punji sticks", cliffs, deep water and bogs. Air Operations Crew briefings, pilots and Air Ops monitoring

Driving All personnel briefed 60kph speed limit, stock on road.

Dust - Ar prews briefed, ground crews supplied PPE and monitor

Fuels and Foam -- Correct handling and storage, crews briefed. Helos now fuelling at staging Poor communications - Air ops to monitor radio

PLB - RCCNZ notified of Chatham Islands activity

Livestock wild bulls and pigs- Ground crews briefed

Non FENZ resources - Operating on the fire ground. Assistance provided, welfare monitored Off road driving (4x4 and LUV) - restricted to DOC and other qualified personnel.

Chainsaws- Only to be operated by unit standard qualified personnel, FULL PPE TO BE USED Hygiene- Wash hands before eating and after toilet breaks

5. Prepared By:

Craig Cottrill



SECTOR ASSIGNMENTS

NB- All sectors on one page.

6. Operations Manager	Affiliation	Phone	Radio Ch
Steve Joyce	FENZ	10-75-13	Fixe RPT 1

7. Resource Allocation

7 1 11000 at ab rate cat	IWII		
Sector	Crew / Resource	Leader (s)	# Bersons
A	Monitor by helo		1
В	Monitor by helo	4	1
С	Taranaki		5
D	Monitor by helo	7/1	
S	Wellington	(7)	5
X	Pumiclands		5
Z	Monitor by helo		
		1.000	

8. Sector Assignment / Special Instructions ALL sectors

- and if available mix with water by poking nozzle . Dig out hot areas to cold earth right into the ground.
- Continuation of extinguis all hot spots to a width of 30m from perimeter containment
- Develop and flag ground access
 Maintain reporting schedules, on commencement of work and twice during each day.
- Use helicopter for water if necessary.
- Use helicopter to recon fire line.

 X-Ray requires wajax and 2 hose packs (Sling in). Drop off HP and work hot spoil Uniup and drown

•	

9. Sector Companications		Phone	Radio Ch
Opeletions Manager.	Clive Lennox		Fire RPT 1
Air Attack Supervisor	New Section 1978		Fire 4
Safety Officer	Craig Cottrill		Fire RPT 1
10. Prepared By:	Clive Lennox		





MEDICAL PLAN

Name	Location	Phone/Radio Channel	Par available at	amedics Station
Point 106	Staging	Fire RPT 1	First Aiders	
Crew Leaders	Various sectors	Fire RPT 1	First Aiders	
				- 8
4. Transportation Ambulance Service Air Operations (Emergency Evac only)	Addre	ess Phone/Rad Channel	lio Par available with	amedics in bulance
St John Ambulance	1 Hospital Road	EE FAG.	Yes	
WestPac Rescue			Yes	
Life Flight				
		1 3	Y	
5. Hospitais		Tr	avel Time Bu	rn
Heli				
		Phone Road	Air Unit	Pad
Chatham's 1 Ho Medical Centre	spital Road	20	10 No	No
viculoal Certife		min	min	
		/		
6. Special Emergency Pro	ocedures			
Medical Centre utilised to	m Wellington			
Life Flight dispatched from	ir fot Awcrait ivlovem	ents		
Life Flight dispatched from Check with Chatham's A	XO		gistics Manager	
Life Flight dispatched from Check with Chatham's A	XO		gistics Manager	
Life Flight dispatched from Check with Chatham's A	XO		gistics Manager	



WEATHER AND FIRE BEHAVIOUR PREDICTION

		Temp	RH	Rain mm	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 75%cured m/hr	Scrub EROS The
Saturday	17/02	20	80	0	30	NW	67	3	70	500 E
Sunday	18/02	20	80	0	20	NW	76	3	70	500 €
Monday	19/02	20	80	0	25	NW	80	3	95	700 E

Prepared By: Gienn Thompson

Updated forecast - 16 February 1530 NZDT

Friday (through to midnight):

- Wind N to NW sustained 15-30 km/h, with gusts to 35 km/h possible
- Temperature decreasing to near 17°C by midnights
- Humidity increasing to near 100% before midnight
- No rainfall expected.
- · Chance for visibility below 1 km increasing after 10 pm.

Saturday (midnight to midnight):

- Wind NNW to NW and increasing. Sustained 15-25 km/h during the morning, increasing to 25-35 km/h during the afternoon. Gusts up to 50 km/h by the afternoon and evening.
- Morning minimum temperature near 17°C, increasing to 23°C in the afternoon.
- · Morning relative humidity near 100%, falling to 80% in the afternoon.
- No rainfall expected during the day; slight chance for a shower at night.
- Chance for visibility below 1 km through 8-9 am.

Sunday (midnight to midnight):

- With NW wind before sunrise becoming variable for a time after sunrise, then tending N to the inthe afternoon. Sustained wind increasing to 20 km/h in the morning, increasing to 15-25 km/h thereafter. Gusts up to 40 km/h possible in the afternoon and evening.

 Morning minimum temperature near 18°C, increasing to 23-23°C in the afternoon.
- Morning relative humidity near 100%, falling to near 85% in the afternoon.
- Slight chance for a morning shower; otherwise, no rainfall expected.

Monday (outlook):

- NW wind 20-25 km/h during the morning increasing to 25-35 km/h during the afternoon and evening. Gusts up to 50 km/h possible in the afternoon and evening.
- Morning minimum temperature near 18°C, increasing to 22-23°C in the afternoon.



Rain from (ex) Tropical Cyclone will most likely begin late Monday night or early Tuesday and peal



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Incident Action Plan

MAKARA FIRE







1. Approved by Incident Controller:

Signed Name

Date/Time

Craig Cottrill

17/2/18 19:00