

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 not of rain has fallen so and crews are currently cold trailing the edge and digging up hotspots. far this week.

7. Action taken

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 dig to 30m from the perimeter. All tracks have been marked and helipads cut.

The first Incident Management Team from n NZ arrived midday on the 3rd Feb and transitioned on the 10 h. The 3rd IMT started on 10 16th of Feb.

8. Factors

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

s 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

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.

Ex tropical cyclone Gits is expected to reach the Chathams on Wednesday, this could bring significant 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)
 - Ensure safety of all responders
 - 2. Protect life of residents
 - 3. Minimise loss of property (especially properties along Waitangi Wharf Owenga Road)
 - 4. Minimise loss of other values, (especially Taiko Trust Ecological area, and Tuuta/Rangaika 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 as 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 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
 - Cold trail and black out pe r to a width 30m in areas where the canopy ound from the air. obscures the view of the Monitor sectors not bein
 - patrolled by helicopter.

Retain at least one aircraft meter is secure.

5. Genn Thompson

Fire RPT



	ORGANISATIO	N LIST		
3. Incident Control		Phone	Cell Phone Ra	dio Ch
Incident Controller	Craig Cottrill	224		Fire RPT 1
Safety Officer	Craig Cottrill	177-2-11		Fire RPT 1
Liaison Officer		14.7		Five RRT 1
4. Agency Representation	re	Phone	Cell Phone	ikio Ch
Lead Agency	FENZ		De	Fire RPT 1
Agency	Chatham Islands Council	810	~	
Agency	Enterprise Trust		0,	
i. Planning/Intel Section		Phone	Cell Phone	Radio Ch
Planning/Intel Manager	Glenn Thompson			Fire RP1
Situations Unit	5	.0		
Resources Unit	Harry Howard	1000		Fire RP1
i. Logistics Section	.0	Phone	Cell Phor	ne Radio Ch
Logistics Manager	Harry Howard	Exelection.		Fire RP
Supply Unit	Sue Stevent (NZ based)		est female	
Catering Unit	A PROVINCES	41 (2)		
Facilities Unit	Y 1			
Finance Unit				
Communications Unit	H			
Wedical Unit				
-0,				
7. Operations Section		1	1	ĩ
Operations Manager	Clive Lennox			Fire RP
Sector Alpha Supervisor				
Sector Zulu Supervisor				

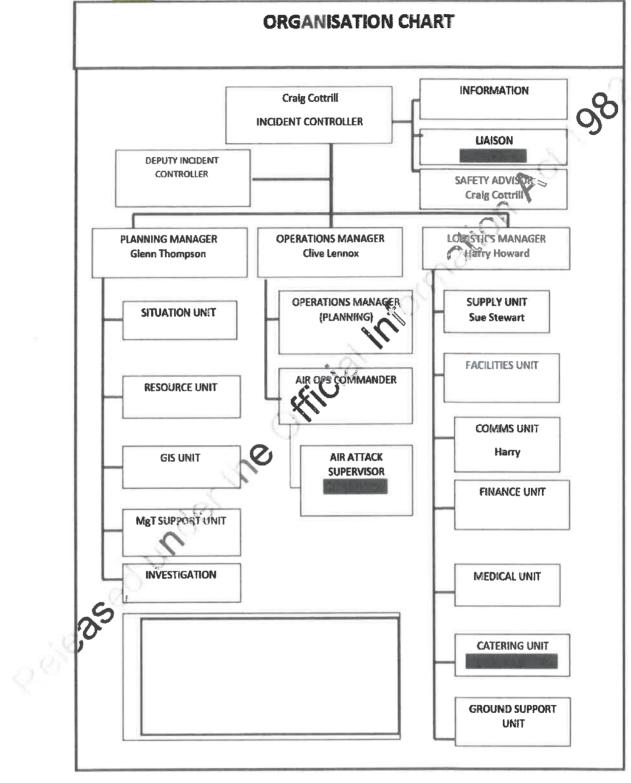


Sector Sierra Supervisor

Air Attack Supervisor

8. Prepared by: Glenn Thompson







3. Radio Channels Assigned To	Function	Channel	Frequency	765
Command	Management	VHF Fire RPT 1		3
Tactical	Crew Coms	VHF Fire 1		0-7
Ground to Air	Air Ops	VHF Fire 4	-	
Air to Air	Pilots	119.1	(0)	
			10	+
Radio channels vers	sus frequency for VHF Radio	Fire RPT 1	1	Com
Pumicelands	ICOM	CH 16		
DOC	Base sets	Ch 30		
FENZ	DUAL Band	Zonia A CH 15		
	2	1		
6. Other (e.g. email	, Sat phone, etc.)	22.	1	
	03	Harry Howard		
7. Prepared by:				



AIR OPERATIONS PLAN

		20	Affiliation	Dhana	Radio Cha
nder	1401	HE	Ammation	Phone	Kadio Ciano
visor	G Dates		GRWC		Fire 4
ervisor					
Pilot	e triffe	l	Southern Helicopters	70,,	Fire 4 Fire RPT 1
Pilot				127	
Assignme				4/2	-: .
Aircraf t Type	Keg or Call sign	Ass	ignment	Freq/Chan	Telephone Numbers
Squirre I B3	IRM	Support g	roundcrews	VHF Fire 4	
DA11/	HGU	(CO)		VHF Fire 4	
	nder visor ervisor Pilot Spilot Assignmen Aircraf t Type Squirre	ervisor Pilot Pilot Assignments Reg or Aircraf t Type Squirre IRM IB3	n Name nder visor Pilot Pilot Assignments Reg or Aircraf Call sign Ass t Type Squirre IRM Support of IB3	Name Affiliation Inder Visor GRWC Bryisor Pilot Southern Helicopters Pilot Assignments Reg or Aircraf Call sign Assignment t Type Squirre IRM Support ground crews IB3	Name Affiliation Phone Index Visor GRWC Bryisor Pilot Southern Helicopters Pilot Reg or Tactical Freq/Chan t Type Squirre IRM Support ground crews VHF Fire 4

Name

Grid Reference

Staging Area

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 airport from Pitt Island. Normal airport operations domestic from Tuuta airfield.

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:



SAFETY PLAN

3. General Safety Points

LACES

Watch out

- L Lookout(s)
- A Anchor Point(s)
- C Communication(s)
- E Escape Route(s)
- S Safety Zone(s)
- Fight fire aggressively but provide for safety first.
- Initiate all action based upon current and experted fire behaviour.

Fire Orders

- Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood.
- Obtain current information on fire status.
- Remain in Communication crew members, your super and adjoining forces
- Determine safety somes and escape routes
- Establish looke ut in potentially hazardous situations.
- Retail@control at all times
- siort, keep calm, think tearly, act decisively.

- Fire not scouted and sized up.
- In country not seen in daylight.
- Safety zones and exapt routes not identified.
- Unfamiliar with tweather and local factors influencing in Denaviour.
 Uninformed in strategy, tactics and hazards.
 Instruction as and assignments not clear.

- No communications link with crew members or
- ionstructing fireline without safe anchor point. Sonstructing 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, pilos 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 Air brews 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



Craig Cottrill





SECTOR ASSIGNMENTS

NB- All sectors on one page.

6. Operations Manager	Affiliation	Phone	Radio
Steve Joyce	FENZ	10 mm	Ne NT 1

7. Resource Allocation

Sector	Crew / Resource	Leader (s)	Persons
A	Monitor by helo		V
В	Monitor by helo		1
С	Taranaki	• 0	5
D	Monitor by helo	₹.	
S	Wellington		5
X	Pumiclands		5
Z	Monitor by helo		
		(CO)	

8. 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 extinguish f all hot spots to a width of 30m from perimeter containment
- Develop and flag ground access
 Maintain reporting sahedules, on commencement of work and twice during
- 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 big up and drown

9. Sector Communications	Phone	Radio Ch
Operations Manager. Clive Lennox		Fire RPT 1
Air Mack Supervisor		Fire 4
Safety Officer Craig Cottrill		Fire RPT 1
10. Prepared By: Clive Lennox		



MEDICAL PLAN

3. First Aid Station		Phone/Radio	•	aramedics
Name	Location	Channel	available :	at Station
Point 106	Staging	Fire RPT 1	First Aiders	
Crew Leaders	Various sectors	Fire RPT 1	First Aiders	30
				~0
4. Transportation	Addre			aramedics
Ambulance Service	i i	Channel	available with	hAmbulance
Air Operations (Emergency Evac only)			11:0) .
St John Ambulance	1 Hospital Road	ERRIEN	Yes	
WestPac Rescue			Yes	
Life Flight				
5. Hospitals	•	N. H.	avel Time	Burn
Heli				
Hospital Name	Address	hone Road	Air Unit	Pad
	Address spital Road	Phone Road	Air Unit	Pad No
Chatham's 1 Ho				
Chatham's 1 Ho		20	10 No	
Chatham's 1 Ho Medical Centre	ospital Road	20	10 No	
Chatham's 1 Ho Medical Centre 6. Special Emergency Pro	ospital Road	20	10 No	
Chatham's 1 Ho Medical Centre 6. Special Emergency Pro Medical Centre utilised to	ocedures ostabilisa patients	20	10 No	
Chatham's 1 Ho Medical Centre 6. Special Emergency Pro Medical Centre utilised to Life Flight dispatched fro	ocedures o stabilise patients m Wellington	20 min	10 No	
Chatham's Medical Centre 6. Special Emergency Promote Medical Centre utilised to Life Flight dispatched from Check with Chatham's A	ocedures o stabilise patients m Wellington ir for all craft Movement	20 min	10 No	No
Chatham's Medical Centre 6. Special Emergency Promote Medical Centre utilised to Life Flight dispatched from Check with Chatham's A	ocedures o stabilise patients m Wellington ir for all craft Movement	20 min	10 No	No
Chatham's Medical Centre 6. Special Emergency Promote Medical Centre utilised to Life Flight dispatched from Check with Chatham's A	ocedures o stabilise patients m Wellington ir for all craft Movement	20 min	10 No	No
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Chatham's Medical Centre 6. Special Emergency Promote Medical Centre utilised to Life Flight dispatched from Check with Chatham's A	ocedures o stabilise patients m Wellington ir for all craft Movement	20 min	10 No	No
Chatham's Medical Centre 6. Special Emergency Promote Medical Centre utilised to Life Flight dispatched from Check with Chatham's A STAFF WITH KNOWN.	ocedures o stabilist patients m Wellington ir (A) Alicraft Movement	ents NS: Advise Lo	10 No	No
Chatham's Medical Centre 6. Special Emergency Promote Medical Centre utilised to Life Flight dispatched from Check with Chatham's A STAFF WITH KNOWN	ocedures o stabilist patients in Wellington ir for all craft Movement MEDICAL CONDITION	ents NS: Advise Lo	10 No	No



WEATHER AND FIRE BEHAVIOUR PREDICTION

		Temp	RH	Rain	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 75%cured m/hr	Scrub EROS m/hr
Sunday	18/02	20	80	0	20	NW	76	2	60	500 E
Monday	19/02	20	80	0	25	NW	79	3	80	600 E
Tuesday	20/02	18	85	5	25	\$	53	1	12	120 E

Prepared By: Glenn Thompson

Updated forecast - 17 February 4:00 pm NZDT

Rest of Today:

- Wind NW, sustained 25-35 km/h. Gusts up to 30 km/h this afternoon and dropping to around 40 km/h this evening.
- Temperature falling to around 18°C by midnight.
- Relative humidity rising to near 100% by about 9 pm.
- · No rainfall expected.

Sunday (midnight to midnight):

- WNW wind before stance becoming variable for a time in the morning, then
 tending NNW by late morning and continuing through the day. Sustained wind 1015 km/h in the morning, increasing to 15-25 km/h thereafter. Gusts 35-40 km/h
 possible in the afternoon and evening.
- Morning minimum temperature near 18°C, increasing to 23°C in the afternoon.
- Morning relative humidity near 100%, falling to near 85% in the afternoon.
- Sight chance for a pre-dawn shower; otherwise, no rainfall expected.
 - Visibility may occasionally drop below 1 km during the afternoon and evening.

Monday (midnight to midnight):

- NW wind becoming WNW in the afternoon. Sustained 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°C in the afternoon.
- Morning relative humidity near 100%, falling to 85% in the afternoon.



- The temperature may fall during the day, from near 20°C early in the morning to the mid-teens in the afternoon.

Makara Fin Shift period: 18th Fet.

... and the day. Showers possibly c.

... the moming and then SE-E in the afternoon. Sust with gusts up to 50 km/h late in the day.

... are may fall during the day, from near 20°C early in the mom.

... in the afternoon.

... ming relative humidity near 100%, falling to 85% in the afternoon.

... Periodic showers possible, with rainfall amounts up to 15 mm.

On the potential impact of Tropical Cyclone Gita

Rain from ex-Tropical Cyclone Gita will most likely peak on Wednesdey into Thursday morning, with a chance for a significant rainfall in excess of 50 miles flowever, there still exists some uncertainty on the storm's track and placement, flewery rainfall. Wind gusts near or above 80 km/h are possible as well, especially Wednesday and Thursday.



	FOG
Time.	Action
	2.00
	and the state of t
	X(0)
-25	



Incident Action Plan

MAKARA FIRE





1. Approved by Incident Controller:

Name Signed Date/Time

Glenn Thompson

18/2/18 19:00



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 gear 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 on Friday, indicated a limited number of hotspote are still visible on the Small flare ups near the perimeter are common, tress and treatment of hotspote are camera data was gathered on Friday, indicated a limited number of hotspote are perimeter and crews are currently cold trailing the edge and digging up its. 50 mm of rain fell last week.

7. Action taken

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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 tay 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 of the flow 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 Tean the 10 h. The 3rd IMT started on 10th 16th of Feb.

8. Factors

Access around fire-pround 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 camera monitoring late last week revealed a much higher number of hot areas than previously estimated. This led to a revision of the objectives especially the completion time. or the last 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.

Rain from ex-Tropical Cyclone Gita will most likely peak on Wednesday evening into Thursday morning, with a chance of 35mm of rain. Wind gusts near or above 80 - 90 km/h are possible as well, especially on Thursday.

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 Road)
 - 4. Minimise loss of other values. (especially Taiko Trust Ecological area, and Tuuta/Rangaika Reserve)
 - 5. To secure the entire perimeter (estimated 50km long) by extinguishing all bur within 30m of perimeter by the 28th February

4. STRATEGY/ STRATEGIES: (Plan of Action to meet tricident Obje

- 1. Appoint a dedicated safety officer.
- 2. Continue to liaise with all effected parties/agencies
- 3. Dedicate resources to the appropriate flank/sec weather dictates
- 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 g to a width 30m in areas where the canopy obscures the view of the nd from the air.
 - Monitor sectors not being patrolled by helicopter

Retain at least one aircraft until perimeter is secure.

5. repared by: Gienn Thompson

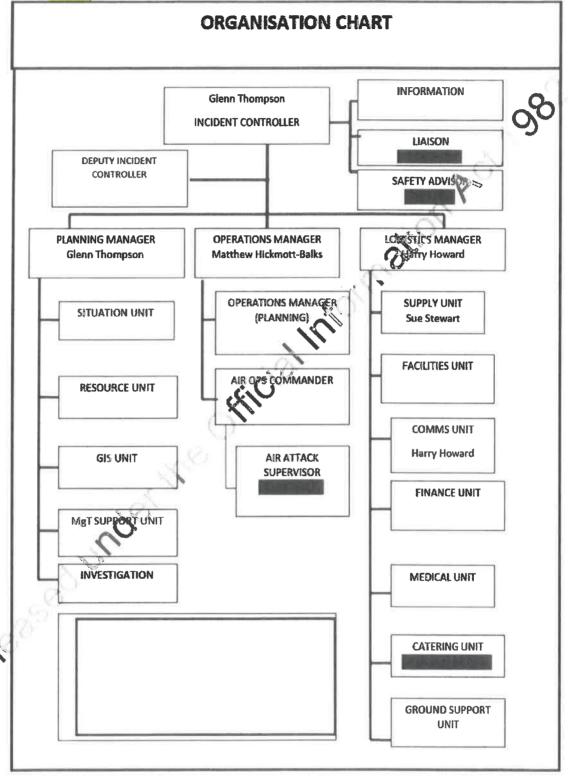


	ORGANISATION LI	ST		
3. Incident Control		Phone	Cell Phone Ra	dio Ch
Incident Controller	Glenn Thompson			Fire RPT 1
Safety Officer		114.54		Fire RPT
Liaison Officer				Fine RPT 1
4. Agency Representation	/e	Phone	Cell Phone Ra	dio Ch
Lead Agency	FENZ	4.8	D	Fire RPT 1
Agency	Chatham Islands Council	200	0	
Agency	Enterprise Trust		0,	
5. Planning/Intel Section		Phone	Cell Phone	Radio Ch
Planning/Intel Manager	Glenn Thompson			Fire RPT
Situations Unit	(0)			
Resources Unit	Harry Howard	周围		Fire RPT
6. Logistics Section	. 3	Phone	Cell Phon	e Radio Ch
Logistics Manager	Harry Howard	1.45		Fire RPT
Supply Unit	Sue Stewart (NZ based)		ENVE	
Catering Unit				
Facilities Unit	Y			
Finance Unit				
Communications Unit				
Medical Unit				

7. Operations Section			
7. Operations Section Operations Manager Sector Alpha Supervisor	Matthew Hickmott-Balks		Fire RPT
Sector Alpha Supervisor			
Sector Zulu Supervisor			
Sector Sierra Supervisor			
Air Attack Supervisor	ARTHUR)	Sauc.	Fire RPT
8. Prepared by:	Glenn Thompson		









3. Radio Channels				
Assigned To	Function	Channel	Frequency	Sy
Command	Management	VHF Fire RPT 1		X
Tactical	Crew Coms	VHF Fire 1		Pa
Ground to Air	Air Ops	VHF Fire 4	0	
Air to Air	Pilots	118.1	"O,	
			-00	
Radio channels versu Agency	is frequency for VHF Radio	Channel		Comme
Pumicelands	ICOM	CH 16		
DOC	Base sets	Ch 30		
FENZ	DUAL Band	Zena A CH 15		
	0			
6. Other (e.g. email,		Harry Howard		
7. Prepared by:		tarry moward		



AIR OPERATIONS PLAN

3. Personnel an	id Commu	nications				_(
Positio	n	Na	me	Affiliation	Phone	Radio Char
Air Div. Comma	nder					0,0
Air Attack Supe	rvisor	LARENT		GRWC		Fire 4 Fire RPT 1
Air Support Sup	ervisor					7
Lead Helicopter	Pilot	Relytin		Southern Helicopters	.0	Fire 4 Fire RPT 1
Lead Fixed-Win	g Pilot				0	
4. Air Resource	Assignme	nts			Charles and the second	•
		Reg or		· ~	Tactical	Telephone
Pilot Name/	Aircraf	Call sign	Ass	ignmen ()	Freq/Chan	Numbers
Company	t Type		25	(0)		15
Southern	Squirre I B3	IRM	Support g	nound crews	VHF Fire 4	
Helicopters	BK117	HGU		O'	VHF Fire 4	

5. Location of Filling Points/Service Areas

Name

Grid Reference

Staging Area

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 airport for Pitt Island. Normal airport operations domestic from Tuuta airfield.

7. Air Operations Special Equip or Service

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

8. 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 behaviour
- Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood.
- 5. Obtain current information on
- 6. Remain in Communication with crew members, your supp and adjoining forces.
- Determine safety agnes and escape routes
- Establish rookeuts in potentially hazardoù situations.
- Retains ontrol at all times.
- 10. Stay slort, keep calm, think Bearly, act decisively.

Watch out

- Fire not scouted and sized up.
- In country not seen in baylight.
 Safety zones and escap, routes not identified.
- Unfamiliar with two ther and local factors influencing in bahaviour.

- Uninformed in strategy, tactics and hazards.
 Instructions and assignments not clear.
 No original actions link with crew members or visor.
- constructing fireline without safe anchor point. Sonstructing Tirenne university of ire. Sonstructing fireline downhill with fire below.
- 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
- 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 -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 - Air Grews 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:

Glenn Thompson



SECTOR ASSIGNMENTS

NB- All sectors on one page.

6. Operations Manager	Affiliation	Phone	Radio Ch
Matthew Hickmott-Balks	FENZ	1000	Fire RPC

7. Resource Allocation

Sector	Crew / Resource	Leader (s)	# Persons
Α	Taranaki	Andrew Lennox	4
В	Taranaki	Andrew Lennox	FIL.
C	Wellington	Bryce Holcroft	5
D	Monitor by helicopter	16/6	
S	Monitor by helicopter	21	5
X	Monitor by helicopter		5
Z	Monitor by helicopter		
	Pumicelands	Andy Wift	5

8. Sector Assignment / Special Instructions

ALL sectors

· Dig out hot areas to cold earth vailable mix with water by poking nozzle right into the ground.

- Continuation of extinguish all hot spots to a width of 30m from perimeter containment
- Develop and flag g
- Maintain reporting s ules, on commencement of work and twice during each day.
- servations at 1000hrs, 1200hrs & 1400hrs.
- Use helicopted for water if neces Use helicopter to recon fire line. or water if necessary.
- ector: Enter via Helipad 9 and head south to Helipad10.

9. Sector Communications		Phone	Radio Ch
Operations Manager.	Matthew Hickmott-Balks		Fire RPT 1
Attack Supervisor	(R) (S) (W. 12)		Fire 4
Safety Officer	450		Fire RPT 1
10. Prepared By:	Glenn Thompson		



MEDICAL PLAN

		Phone/Radio		Paramedics
Name	Location	Channel		ble at Station
Point 106	Staging	Fire RPT 1	First Aider	
Crew Leaders	Various sectors	Fire RPT 1	First Aider	S
				2
			6	
4. Transportation	Addre	ess Phone/Rac		Paramedics
Ambulance Service	1	Channel	Sidelievs	with Ambulance
Air Operations			16	
(Emergency Evac only)		-	Yes	
St John Ambulance	1 Hospital Road	1	Yes	
WestPac Rescue	+	7.7.	res	
Life Flight		.00	-	
		A. (1)	avel Time	Burn
5. Hospitals Heli Hospital Name Chatham's 1 He	Address ospital Road	hone Road	T.	nit Pad
Medical Centre	ospital Road	min 20	min	140
	- 10	11307	1111111	
	733			
6. Special Emergency Pr	océdures			
	stabilise patients om Wellington Air for Aircraft Movem		.ogistics Ma	anager
6. Special Emergency Property Medical Centre utilised Life Flight dispatched to Check with Chatham's A STAFF WILL KNOWN IN THE CONTROL OF THE	e stabilise patients om Wellington Air for Aircraft Movem	ONS: Advise L	.ogistics M a	anager



WEATHED	AND	FIRE BEHAVIOUR PREDICTION
WWICHERICA		FIRE DELIMINATION PREDICTION

Monday	19/02	Temp	RH 85	Rain mm	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 75%cured m/hr	Scrub EROS m/m
Tuesday	20/02	20	80	15	20	S	48	1	3	40 E
Wednesday	21/02	20	80	10	30	NW	49	1	8	90 E

Prepared By: Glenn Thompson

Updated forecast -- 19 February 5:45 am NZDT

Monday (midnight to midnight):

- NW wind becoming W in the afternoon, then SW after 6 pm. Sustained 20-30 km/h to 9 am, increasing to 30-40 km/h thereafter by 6 pm then decreasing to 15-25 km/h after 9 pm. Sustained 20-30 km/h. after 9 pm. Gusts to 55 km/h possible from mid-morning to mid-afternoon, then less than 40 km/h after 8 pm.

 Temperature increasing to 23°C in the afternoon.
- Relative humidity decreasing to their 80% in the afternoon.
- · No rainfall expected.
- · Visibility forecast to stay above

Tuesday (midnight to midnight):

- SW wind sustained 20 km/h or less, becoming NE after 3 am. After 9 am sustained wind becoming and increasing to Sustained winds 20-30 km/h in the morning, then increasing to 23/36 km/h. Gusts to 45 km/h in the afternoon.
- Early morning temperature near 15°C before sunrise, increasing to near 19°C and nearly steady through about 6 pm.
- Relative humidity near 100% in the morning, decreasing to 85-90% at times.
- Periods of rain likely, heavy at times, with rainfall amounts of 20-40 mm assible. Visibility may drop below 1 km at times.
- Disibility may drop below 1 km at times, especially over any higher terrain.

ednesday (midnight to midnight):

- SE to NE before 6 am, then becoming NW. Sustained winds 25-35 km/h to near 6 am, then increasing to 30-40 km/h, thereafter. Gusts to 60 km/h possible, mainly in the afternoon.
- Early morning temperature near 16-17°C around midnight, then climbing to near 23-24°C.
- Morning relative humidity near 100%, falling to 75-80% in the afternoon.
- Showers likely, mainly during the morning, amounts 10 mm or less. Afternoon sun

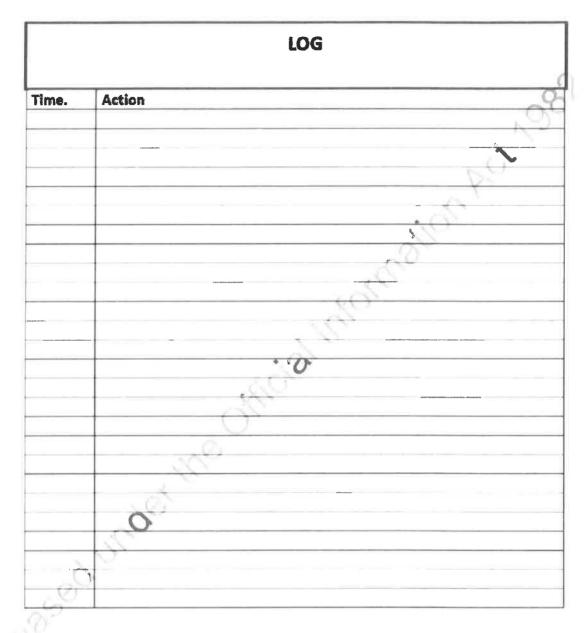


· Visibility may drop below 1 km at times during the morning, especially over any higher terrain.

Thursday Outlook:

- Wind NW tending W'ly by 6 am then SW near midday and beyond Sustained 25aine afer 8 p. in the official information Act km/h, with gusts to 60 km/h possible to midday. Winds easing near/after 6 pm







Incident Action Plan

MAKARA FIRE



1. Approved by Incident Controller:

Name

Glenn Thompson

Signed

Date/Time

19/2/18 19:00



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 or Sunday. Small flare ups near the perimeter were common and these were easily contained by helicopters. Thermal camera data gathered on Friday 16th, indicated a limited number of notspots, these were Thermal camera data gathered on Friday 16th, indicated a limited number suppose, sup the 19 h showed a small number of hotspots in the centre of the burn, 190m south of the Sierra sector fire line. These were extinguished by ground crews. 50 min of rain fell last 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 Zulu/Sierra, for protection of structures.

Ground crews are focusing on blacking to stope and helipads cut. ground crews with transport and bucket work. om from the perimeter. All tracks have been marked

m NZ arrived midday on the 3rd Feb and transitioned on The first Incident Management Tean the 10 h. The 3rd IMT started on the 16th of Feb.

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 carrier monitoring during the second week of the fire revealed a much higher number of hot areas than previously estimated. This led to a revision of the objectives especially the completion time. The last thermal run indicated that crews had been making great progress and there was a limited number of hotspots remaining; 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.

Rain from ex-Tropical Cyclone Gita over Tuesday, Wednesday and Thursday could bring up to 50mm of rain. Wind gusts up to 60 km/h are possible on Wednesday, especially in the afternoon.

10. Prepared by: GLENN THOMPSON





INCIDENT OBJECTIVES AND STRATEGIES

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

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

- 1. Appoint a dedicated safety officer.

- Continue to liaise with all effected parties/agencies
 Dedicate resources to the appropriate flant/sector as weather dictates
 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

 Cold trail and black outperimeter to a width 30m in areas where the canopy
 - round from the air. obscures the view of the ground from the air. Monitor sectors not being patrolled by helicopter.

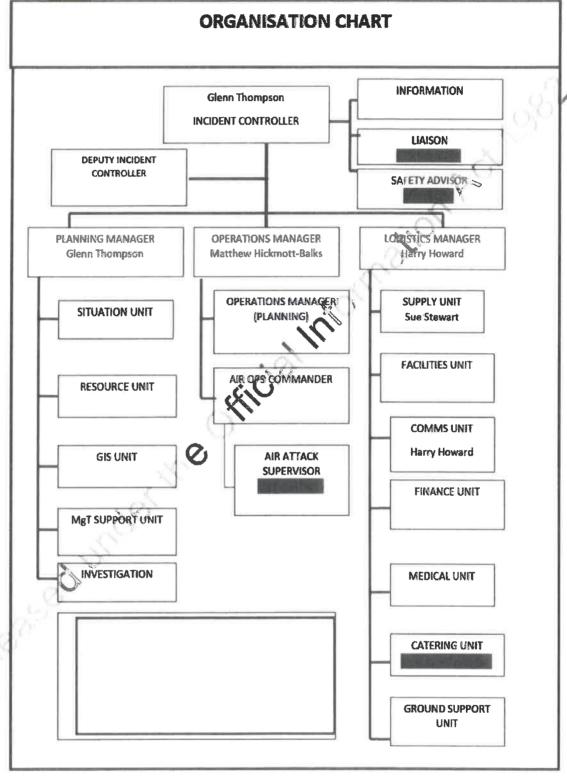
Retain at least one aircraft until perimeter is secure.

Glenn Thompson



3. Incident Control		Phone	Cell Phone Rac	lio Ch
Incident Controller	Glenn Thompson	196		Fire RPT 1
Safety Officer	A	#E II A		Fire RPT 4
Liaison Officer		fi tal		Fire RPT 1
4. Agency Representativ	/e	Phone	Cell Phone	die Ch
Lead Agency	FENZ		Doy	Fire RPT 1
Agency	Chatham Islands Council		0	
Agency	Enterprise Trust	EE	0,	
5. Planning/Intel Section		Phon	Cell Phone	Radio Cl
Planning/Intel Manager	Glenn Thompson			Fire RP
Situations Unit	SQ	0		
Resources Unit	Harry Howard	REEL		Fire RP
5. Logistics Section	.0	Phone	Cell Phon	e Radio Ci
Logistics Manager	Harry Howard	1.3		Fire RP
Supply Unit	Sue Stewen (NZ based)		THEAT	
Catering Unit		J. 15-11 1		
Facilities Unit	(C)			
FinancerUnit				
Communications Unit				
Medical Unit				
- O'				
7. Operations Section		1	1	11
Operations Manager	Matthew Hickmott-Balks	02450		Fire RP
Sector Alpha Supervisor				
Sector Zulu Supervisor				
Sector Sierra Supervisor				
Air Attack Supervisor	Assert all			Fire RP
8. Prepared by:	Glenn Thompson			1







3. Radio Channels Assigned To	Function	Channel	Frequency	S
Command	Management	VHF Fire RPT 1		1
Tactical	Crew Coms	VHF Fire 1	(2
Ground to Air	Air Ops	VHF Fire 4		
Air to Air	Pilots	118.1	1,0,	
			20	
	ous frequency for VHF Radio	Fire RPT 1 Channel		ommo
Agency Pumicelands	ICOM	CH 16		ommo
DOC	Base sets	Ch 30		
FENZ	DUAL Band	Zena A CH 15		
	0	10		
	- 10°			
7. Prepared by:	(/1	larry Howard		



AIR OPERATIONS PLAN

l Commur	nications				
93	Nai	ne	Affiliation	Phone	Radio Chal
der					, O)
visor		V 111	GRWC		Fire 4 Fire RPT 1
rvisor					7-
Pilot	a particular services		Southern Helicopters	0,0	Fire 4 Fire RPT 1
Pilot				9	
\ssignmer	its			410	
Aircraf t Type	Reg or Call sign	Ass	signment	Tactical Freq/Chan	Telephone Numbers
Squirre I B3 BK117	IRM HGU			VHF Fire 4	
	der visor rvisor Pilot Aircraf t Type Squirre B3	rvisor Pilot Ssignments Reg or Aircraf Call sign t Type Squirre IRM	Name der visor Pilot Ssignments Reg or Aircraf Call sign Ass t Type Squirre IRM Support 9	Name Affiliation der visor GRWC rvisor Pilot Southern Helicopters Pilot ssignments Reg or Aircraf Call sign Assignment t Type Squirre IRM Support ground crews	Name Affiliation Phone der visor GRWC rvisor Pilot Southern Helicopters Pilot Reg or Tactical Freq/Chan t Type Squirre IRM Support groundscrews VHF Fire 4

5. Location of Filling Points/Service Areas

Name

Grid Reference

Staging Area

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 airport long Pitt Island. Normal airport operations domestic from Tuuta airfield.

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:



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
- Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood.
- Obtain current information on fire status.
- Remain in Communication crew members, your supers and adjoining forces.
- Determine safety agries and escape routes
- Establish rookouts in potentially hazardous situations.
- Retainsontrol at all times.
- dort, keep calm, think deanly, act decisively.

Watch out

- Fire not scouted and sized up.
- In country not seen in daylight.
- Safety zones and exap routes not identified.
- Unfamiliar with weather and local factors influencing man haviour.

- Uninformed in strategy, tactics and hazards.
 Instructions and assignments not clear.
 No communications link with crew members or
- 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 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
- 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 - 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



Glenn Thompson





SECTOR ASSIGNMENTS

NB- All sectors on one page.

- 3				
I	6. Operations Manager	Affiliation	Phone	Radio Ch
I	Matthew Hickmott-Balks	FENZ	A STREET	Fire RPT/

7. Resource Allocation

Sector	Crew / Resource	Leader (s)	# Persons
A	Monitor by helicopter		1
В	Monitor by helicopter		1
С	Monitor by helicopter		1
D	Monitor by helicopter	11/2	
S	Monitor by helicopter	25	
X	Monitor by helicopter	200	
Z	Monitor by helicopter		
All sector hotspots	Wellington	Bryge Holdroft	5

8. 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 extinguishment of all hot spots to a width of 30m from perimeter containment

Develop and flag ground access
Maintain reporting schedules, or

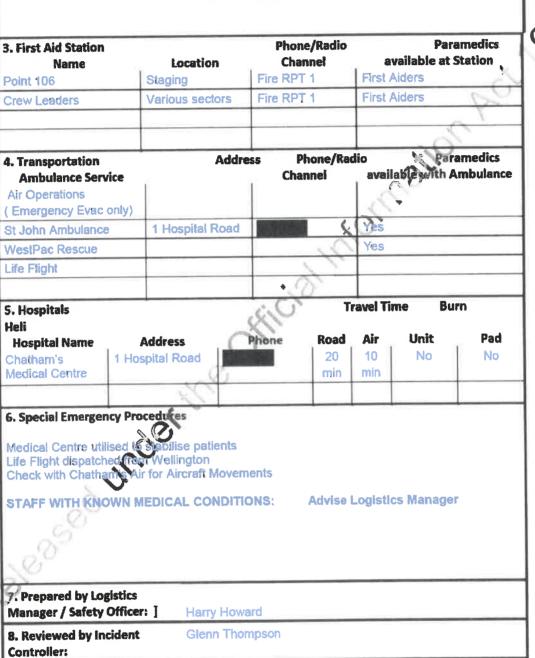
 Maintain reporting schedules, on commencement of work and twice during each day.

- Fireline weather observations at 1000hrs, 1200hrs & 1400hrs.
- · Use helicopter for water if necessary.
- Use helicopter to recon fire line.

9. Sector Communications		Phone	Radio Ch
Operations Manager.	Matthew Hickmott-Balks		Fire RPT 1
Air Attack Supervisor	US13:034V		Fire 4
Safety Officer	Programme I		Fire RPT 1
10. Prepared By:	Glenn Thompson		



MEDICAL PLAN







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	20/02	20	85	20	25	SE	43	1	1	17 E
Wednesday	21/02	23	75	10	30	NW	62	2	49	402 E
Thursday	22/02	19	75	0	40	NW	71	5	198	1202 E

Prepared By: Glenn Thompson

Updated forecast - 19 February 4:20 pm NZDT

Rest of Today:

- WNW wind gradually turning SW during the evening. Sustained 25-35 km/h through about 6 pm then decreasing to 15-25 km/h after 9 pm. Gusts to 50 km/h possible, then dropping below 40 km/h after 8 pm.
- · Temperature dropping to 17°C by faidright.
- Relative humidity increasing to near 95% by midnight.
- No rainfall expected.
- Visibility expected to stay above 1 km.

Tuesday (midnight danight):

- SW wind sustained 15 km/h or less, becoming SE-E after 4 am. After 9 am sustained wind becoming E and increasing to 20-30 km/h, then increasing to 25-35 km/h in the afternoon. Gusts to 45-50 km/h in the afternoon and evening.
 - Parly morning temperature near 15°C before sunrise, increasing to near 20°C in the afternoon.

Relative humidity near 100% in the morning, decreasing to 85-90% at times.

- Periods of rain expected, with rainfall amounts of 15-30 mm possible.
- Visibility may drop below 1 km at times in the afternoon and evening, especially over any higher terrain.



Wednesday (midnight to midnight):

- SE to NE before 6 am, then becoming NW. Sustained winds 25-35 km/h to near 6 am, then increasing to 30-40 km/h, thereafter. Gusts to 60 km/h possible, mainly in the afternoon.
- Early morning temperature near 16-17°C around midnight, then climbing to near 23-24°C.
- Morning relative humidity near 100%, falling to 75-80% in the afternoon.
- Showers likely, mainly during the morning, amounts 10 mm or less. Atternoon sun possible.
- Visibility may drop below 1 km at times during the morning, especially over any higher terrain.

Thursday Outlook:

- Wind NW tending W'ly by 6 am then SW near plicday and beyond. Sustained 25-40 km/h, with gusts to 60 km/h possible to middley. Winds easing near/after 6 pm.
- Temperature near 16-17°C in the morning increasing to near 19 °C in the afternoon.
- Relatively humidity decreasing 6.75-80% in the afternoon.
- · Little or no rain expected.



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Incident Action Plan MAKARA FIRE 1. Approved by Incident Controller: Name Signed Date/Time 19/2/18 19:00 Glenn Thompson



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 or Sunday. Small flare ups near the perimeter were common and these were easily contained by helicopters. Thermal camera data gathered on Friday 16th, indicated a limited number of hotspots, these were extinguished over Saturday 17th and Sunday 18th of Feb. Over the weekend crews have cold trailed sectors along Alpha, Bravo, Charlie, Sierra and Xray. Further aerial reconnaissance on Monday the 19th showed a small number of hotspots in the centre of the burn, 190m south of the Sierra sector fire line. These were extinguished by ground crews. 50 mg/m/m/m/m/m fain fell last 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 Seotor 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 blackinggott 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 16th of Feb.

8. Factors

Access around fire-gravit difficult due to risk of peat Tomo's meaning access restricted to tracks with assistance of least duides.

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 camers monitoring during the second week of the fire revealed a much higher number of hot areas than previously estimated. This led to a revision of the objectives especially the completion time. The last thermal run indicated that crews had been making great progress and there was a limited number of hotspots remaining; 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.

Rain from ex-Tropical Cyclone Gita over Tuesday, Wednesday and Thursday could bring up to 50mm of rain. Wind gusts up to 60 km/h are possible on Wednesday, especially in the afternoon.

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/Ran
 - 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 flant/sector as 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

 Cold trail and black outpersimeter to a width 30m in areas where the canopy obscures the view of the ground from the air.

 - Monitor sectors not being patrolled by helicopter

Retain at least one aircraft until perimeter is secure.

repared by: Glenn Thompson

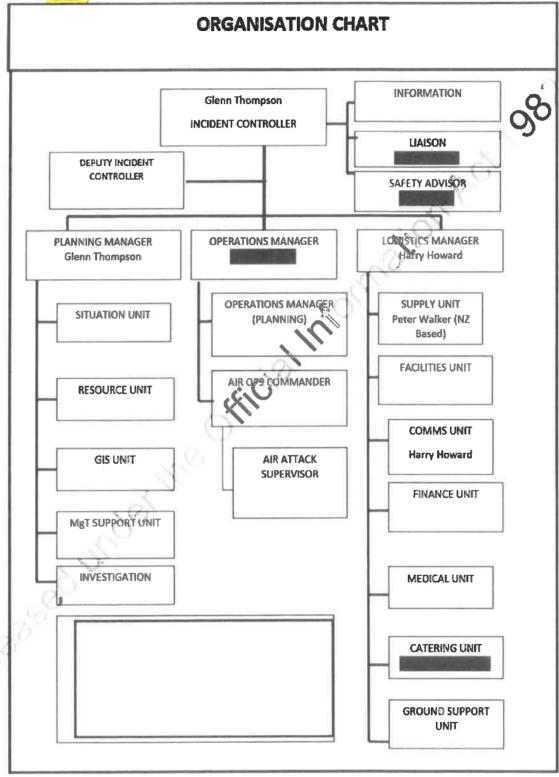


	ORGANISATIO	N LIST	
3. Incident Control		Phone	Cell Phone Radio Ch
Incident Controller	Glenn Thompson		Fire RPT 1
Safety Officer			Fire RETT
Liaison Officer	制的企业 。		Five RP7 1
4. Agency Representativ	/e	Phone	Cell Phone Harlio Ch
Lead Agency	FENZ		Fire RPT 1
Agency	Chatham Islands Council	1611	0
Agency	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		Fire RPT
6. Logistics Section	10.	Phone	Cell Phone Radio Ch
Logistics Manager	Harry Howard	F2.0	Fire RPT
Supply Unit	Peter Worker (NZ based)		
Catering Unit	CHICKEN !		
Facilities Unit	6		
FinancerUnit			
Communications Unit			
Medical Unit			

7. Operations Section		
7. Operations Section Operations Manager O Sector Alpha Supervisor		Fire RPT
Sector Alpha Supervisor		
Sector Zulu Supervisor		
Sector Sierra Supervisor		
Air Attack Supervisor		
8. Prepared by:	Glenn Thompson	









				0
3. Radio Channels Assigned To	Function	Channel	Frequency	System
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	118.1	1.0	
			25	
			000	
Radio channels versu Agency	us frequency for VHF Radio	Fire RPT 1 Channel		Comments
		Fire RPT 1 Channel Ch 30	1	Comments
Agency	Radio	Channel (Channel)		Comments
Agency	Radio Base sets	Channel Ch 30	4	Comments
DOC	Radio Base sets	Channel Ch 30		Comments
Agency	Radio Base sets DUAL Band	Channel Ch 30		Comments
Agency DOC FENZ	Radio Base sets DUAL Band	Channel Ch 30		Comments
Agency DOC FENZ	Radio Base sets DUAL Band	Channel Ch 30		Comments

7. Prepared by:



AIR OPERATIONS PLAN

3. Personnel and	a Commu	ncations				~ '
Position	1	Nai	me	Affiliation	Phone	Radio Char
Air Div. Comma	nder					(2)
Air Attack Super	visor	17/19		GRWC		Fire 4 Fire RPT 1
Air Support Sup	ervisor					* E
Lead Helicopter	Pilot	THE ALL	ı	Southern Helicopters	200	Fire 4 Fire RPT 1
Lead Fixed-Wing	Pilot				0	
4. Air Resource	Assignmer	nts		a1	41	
Pilot Name/ Company	Aircraf t Type	Reg or Call sign	Ass	ignmens O	Tactical Freq/Chan	Telephone Numbers
Southern Helicopters	Squirre 1 B3	IRM		noundicrews	VHF Fire 4	
Garden City	BK117	HGU	"ici	•	VHF Fire 4	

5. Location of Filling Points/Service Areas

Name

Grid Reference

Staging Area

Various dipping points within fire ground

6. Safety Notes / Hazards / Radio Coverage Limitations

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

7. Air Operations Special Equip or Service

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

8. 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 behaviour.
- Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood.
- 5. Obtain current information on fire status.
- 6. Remain in Communication crew members, your supply and adjoining forces.
- Determine safety apres, and escape routes
- Establish tookeuts in potentially hazardour situations.
- Retainsontrol at all times. 10. Seny blant, keep calm,

Watch out

- Fire not scouted and sized up.
- In country not seen in anylight.
 Safety zones and excap routes not identified.
- Unfamiliar with sweetner and local factors influencing An bahaviour.
- Uninformed in strategy, tactics and hazards. Instructions and assignments not clear.
- No. on munications link with crew members or
- Constructing fireline without safe anchor point, Constructing fireline downhill with fire below.
- 40
- 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
- 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 -Air Ops, pitots 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 - Air crews briefed, ground crews supplied PPE and monitor

Fuels and Foam - Correct handling and storage, crews briefed. Helicopters now fuelling

staying area.

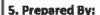
Foor communications - Air ops to monitor radio

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



Glenn Thompson





SECTOR ASSIGNMENTS

NB- All sectors on one page.

6. Operations Manager	Affiliation FENZ	Phone	Radio Ci
7. Resource Allocation			×
Sector	Crew / Resource	Leader (s)	# Persons
A	Monitor by helicopter		1
В	Monitor by helicopter		1
C	Monitor by helicopter		1
D	Monitor by helicopter	7.15	
S	Monitor by helicopter	7	
X	Monitor by helicopter	200	
Z	Monitor by helicopter	11/2	

8. Sector Assignment / Special Instructions

ALL sectors

All sector hotspots

Dig out hot areas to cold earth and if available mix with water by poking nozzle right into the ground.

Bryce Holcroft

- Continuation of extinguishmen of all hot spots identified through aerial reconnaissance.

Wellington

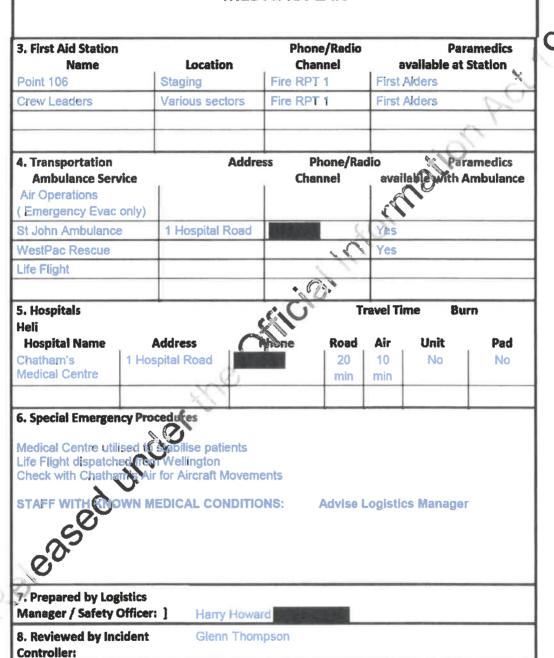
- Develop and flag ground access
 Maintain reporting schedules, on commencement of work and twice during each day.
- epservations at 1000hrs, 1200hrs & 1400hrs.
- Use helicopter for water if necessary.Use helicopter to recon fire line.

9. Sector Communicatio	ns	Phone	Radio Ch
Operations Manage	r. MARSAUM		Fire RPT 1
-0			& Fire 4
Attack Supervise	or		
Safety Office	er Makkada		Fire RPT 1
10. Prepared B	Matthew Hickmott-Balks		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,





MEDICAL PLAN





WEATHER AND FIRE BEHAVIOUR PREDICTION

		Temp	RH	Rain mm	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 65%cured m/hr	Scrub EROS m/hr
Wednesday	21/02	23	75	10	35	NE	63	2.9	84	618
Thursday	22/02	20	80	0	35	NW	81	7.6	376 v	1899 E
Friday	23/02	19	75	0	30	SW	70	2.8	82	606 E

Prepared By: Glenn Thompson

Updated forecast - 20 February 4:15 pm NZDT

Rest of Today:

- E wind sustained 30-40 km/h, tending NE late. Susts to 45-50 km/h.
- Temperature falling to near 16°C by mighight
- Relative humidity increasing to near 105% by midnight.
- Periods of rain developing, with rainfall amounts of 10-20 mm possible.
- Visibility may drop below 1 km at times in the afternoon and evening, especially over any higher terrain.

Wednesday (midnight to fuldnight):

- E to NE before 2-3 am, then becoming N and eventually NW by late morning. Sustained winds 25-35 km/h to near 6 pm, then decreasing to 20-25 km/h in the evening. Gusts to 55 km/h possible through early afternoon, then slowly decreached
- Morning relative humidity near 100%, falling to 75% in the afternoon.

 Showers likely, mainly during the early by morning temperature near 16-17°C around midnight, then climbing to near

Showers likely, mainly during the early morning, with amounts of 10 mm or less. Clearing by the afternoon.

Visibility may drop below 1 km at times during the early morning, especially over any higher terrain.



Thursday (midnight to midnight):

- Wind NW tending W by 6 am then SW after midday. Sustained 25-35 km/h, with
- Temperature near 16-17°C in the morning increasing to near 19-20°C in the afternoon.

 Relatively humidity decreasing to
- Relatively humidity decreasing to 75-80% in the afternoon.
- · Chance of a couple evening showers.

Friday outlook:

- relatively humidity decreasing to 75-80% in the afternoon.

 Chance of a couple evening showers.

 y outlook:

 Wind SW sustained 25-35 km/h with gusts to 50 km/h, early, then increasing to 60-65 km/h in the afternoon.

 Temperature near 15°C in the
- Temperature near 15°C in the morning increasing near 19°C in the afternoon. gin 75% in 175% in 175
 - Relatively humidity decreasing to 75% in the afternoon.



Time. Action	
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Incident Action Plan

MAKARA FIRE



1. Approved by Incident Controller:

Name Signed Date/Time

Glenn Thompson 21/2/18 18:00



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 or Sunday. Small flare ups near the perimeter were common and these were easily contained by helicopters. Thermal camera data gathered on Friday 16th, indicated a limited number of hotspots, these were extinguished over Saturday 17th and Sunday 18th of Feb. Over the weeks of ews have cold trailed sectors along Alpha, Bravo, Charlie, Sierra and Xray. Further aerial recomaissance on Monday sectors along Alpha, Bravo, Charlie, Sierra and Xray. Further aerial responsissance on Monday the 19 h showed a small number of hotspots in the centre of the burn, 4,00m south of the Sierra sector fire line. These were extinguished by ground crews. On Wednesday the 21st of February 2018 aerial reconnaissance did not pick up any further hotspots. 20mm of rain has fallen 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 from NZ arrived midday on the 3rd Feb and transitioned on the 10 h. The 3rd IMT started on the 16th of Feb.

8. Factors

8. Factors

Access around fire-ground difficult due to risk or possible.

with assistance of local guides.

Obtaining resources that are not available on the island will take 2-4 days to arrive. Gund difficult due to risk of peat Tomo's meaning access restricted to tracks

Thermal camera monitoring during the second week of the fire revealed a much higher number of hot areas than previously estimated. On Wednesday the 21st of February the fire perimeter was fully contained using ground crews and aircraft. Incident objectives have been changed to reflect the origoing fire ground monitoring that will occur over the next two weeks.

9. Predicted Incident Development

Containment of the entire fire perimeter (estimated at 50km long) by extinguishing all burning material within 30m of the perimeter by the 28th of February, has been achieved. On-going monitoring of the fire will continue to occur over the next two weeks by Fire and Emergency NZ personnel and DOC Staff. Ground crew are now recommissioning firefighting equipment and aircraft are being prepared for the journey back to New Zealand.

10. Prepared by: GLENN THOMPSON



INCIDENT OBJECTIVES AND STRATEGIES

- 3. INCIDENT OBJECTIVE(S)/AIM MISSION: (SMART, Specific, Measureable, Achievable Relevant, Time bound)
 - Ensure safety of all responders
 - 2. Protect life of residents
 - 3. Minimise loss of property (especially properties along Waitangi Wharf Owenga Road)
 - 4. Minimise loss of other values, (especially Taiko Trust Ecological area, and Tuuta/Rangaika Reserve)
 - 5. To continue to monitor the fire ground until the 16th of March 2018.

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

- Appoint a Safety Officer for the recommissioning at the lighting resource of the path all effected parties/agencies on a regular basis. ghting resources.
- Continue to liaise with all effected parties/agencies
 Monitor the fire ground using ground observation

5. Glenn Thompson

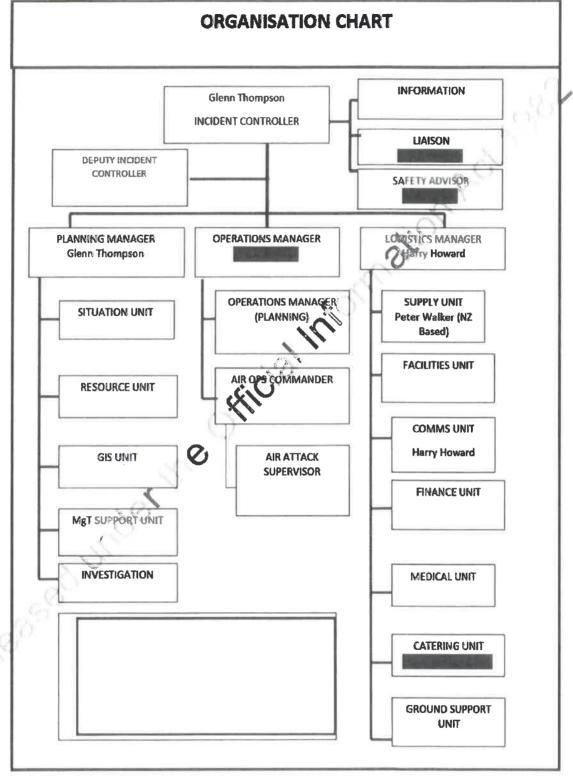


Sector Sierra Supervisor
Air Attack Supervisor

8. Prepared by: Glenn Thompson

	ORGANISATION	LIST	
3. Incident Control		Phone	Cell Phone Radio Ch
Incident Controller	Glenn Thompson		Fire RPT 1
Safety Officer			Fire RPT 1
Liaison Officer			Fire RET 1
4. Agency Representati	/e	Phone	Cell Phone Railio Ch
Lead Agency	FENZ	(0) 30	Fire RPT 1
Agency	Chatham Islands Council		0,
Agency	Enterprise Trust		0,
5. Planning/Intel Section		Pipo	Cell Phone Radio Ch
Planning/Intel Manager	Gienn Thompson		Fire RPT
Situations Unit	<u> </u>	0	
Resources Unit	Harry Howard		Fire RPT
6. Logistics Section	.0	Phone	Cell Phone Radio Ch
Logistics Manager	Harry Howard		Fire RPT
Supply Unit	Peter Walker (NZ based)		AND THE RES
Catering Unit	Luza in mart		
Facilities Unit	0		
Finance Unit			
Communications Unit			
Medical Unit			
77			
7. Operations Section			
Operations Manager	华层观的	St.	Fire RPT
Sector Alpha Supervisor			
Sector Zulu Supervisor			







3. Radio Channels Assigned To	Function	Channel	Frequency	Sys
Command	Management	VHF Fire 1		1
Tactical	Crew Coms	VHF Fire 1		D.
			90.	
			-0	
			1	
Radio channels vers	sus frequency for VHF Radio	Fire RPT 1 Channel	1	Commen
DOC	Base sets	Ch 30		#willing!
FENZ	DUAL Band	Zone & CH 15		
	- 25			
6. Other (e.g. email	, Sat phone, etc)	4	-	
	- 0			
	2			
7. Prepared by:	No.			
7 December 1	(O)	Harry Howard		



		AIR O	PERATIONS PL	AN	
3. Personnel an Position		nications Name	Affiliation	Phone	Radio Ch
Air Div. Comma	nder				
Air Attack Super	visor				k
Air Support Sup	ervisor				VO.
Lead Helicopter	Pilot				Y-
Lead Fixed-Wing	Pilot				
4. Air Resource Pilot Name/ Company	Aircraf t Type	Reg or Call sign	Assignment	Pred/Chan	Telephon Numbers
at connect tangent	, remarks	/ Radio Coverag			
Helicopters are	e being pr	quip or Service epored by the p uired by pilots.	ilots for the return to	New Zealand.	Crews will



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 hehaviour
- 3. Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood.
- Obtain current information on fire status.
- Remain in Communication y crew members, your suppl and adjoining forces.
- 7. Determine safety zones and escape routes escape routes
- Establish tookouts in potentially hazardouh situations.
- Retails control at all times.
- 10. See alort, keep calm, think

Watch out

- 1. Fire not scouted and sized up.
- In country not seen in taylight.
 Safety zones and escap routes not identified.
- Unfamiliar with eventuer and local factors influencing ## Dahaviour.
- Uninformed in strategy, tactics and hazards. Instructions and assignments not clear.
- No continunications link with crew members or visor.
- Sonstructing fireline without some sons sonstructing fireline downhill with fire below. constructing fireline without safe anchor point.
- 10. 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

Weather -Crews briefed and monitoring for rapid change.

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

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

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

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

Fuels and Foam - Correct handling and storage, crews briefed. Helicopters now fuelling at staying area.

Poor communications - IMT to monitor radio

PUB - RCCNZ notified of Chatham Islands activity

Livestock wild bulls and pigs- Ground crews briefed

Off road driving (4x4 and LUV) - restricted to DOC and other qualified personnel.

Hygiene- Wash hands before eating and after toilet breaks

5. Prepared By:

Glenn Thompson



Fire 1



Air Attack Supervisor

Safety Officer

10. Prepared By:

SECTOR ASSIGNMENTS NB- All sectors on one page. Affiliation **Phone** 6. Operations Manager **FENZ** 7. Resource Allocation Leader (s) # Persons Sector Crew / Resource Monitor by ground observation A Monitor by ground observation Monitor by ground observation Monitor by ground observation S Monitor by ground observation Monitor by ground observation Bryce Holcroft All sector hotspots Wellington 8. Sector Assignment / Special instructions **ALL** sectors · Dig out hot areas to cold earth a available mix with water by poking nozzle right into the ground. of all hot spots identified through ground based Continuation of extinguishmer reconnaissance. Develop and flag grou thedules, on commencement of work. Maintain reporting s Radio Ch 9. Sector Communications Phone Fire 1 Operations Manager.



MEDICAL PLAN

3. First Aid Station Name Point 106	Location Staging	Phone/Radio Channel Fire 1		Paramedics at Station
Crew Leaders	Various sectors	Fire 1	First Aiders	- 0
				1
4. Transportation Ambulance Service Air Operations (Emergency Evac only)	Addre	ess Phone/Rad Channel	dio P available with	arangedics if Ambulance
St John Ambulance	1 Hospital Road		Yes	
WestPac Rescue	1 1 tospital 1 toda	THE REAL PROPERTY.	Yes	
Life Flight		2		
			4	
5. Hospitals Heli Hospital Name		Phone Road	Air Unit	Burn Pad
5. Hospitals Heli Hospital Name	spital Road	Tr		



WEATHER AND FIRE BEHAVIOUR PREDICTION

		Temp	RH	Rain mm	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 65%cured m/hr	Scrub EROS m/hr
Thursday	22/02	21	75	5	30	NW	67	2.7	73	553 E
Friday	23/02	20	80	5	30	sw	61	2.0	46	378 E
Saturday	24/02	19	75	0	30	SW	61	2.8	82	606 €

Prepared By: Glenn Thompson

Updated forecast - 21 February 4:15 pm NZDT

Rest of today:

- NW 15-25 km/h. Gusts up to 40 km/h through the evening, then decreasing tonight.
- · Temperature falling to near 17°C by midnight
- Relative humidity increasing to around 100% by midnight.
- · No rainfall expected.

Thursday (midnight to midnight):

- Wind NNW tending W late to the morning, then SW after 5:00 pm. Sustained 20-30 km/h in the morning, then 25-40 km/h in the afternoon and evening with gusts to 60 km/h possible, decreasing in the evening.
- Temperature near 16-17°C in the morning increasing to near 21°C in the afternoon.
- Relative hungitary near 95% early, decreasing to 70-75% in the afternoon.
- Chance of a couple showers early in the morning and again in the evening. Total rainfall 5 mm or less.
- Stort chance for visibility less than 1km before 8:00 am.

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- Temperature near 15°C in the morning increasing to near 20°C in the afternoon.
- Relative humidity near 95% early, decreasing to 75% in the afternoon.
- Scattered showers possible in the afternoon and evening. Total rainfall 5 mm or less.



Saturday outlook:

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Incident Action Plan

MAKARA FIRE



1. Approved by Incident Controller:

Glenn Thompson

Name Signed

Date/Time

21/2/18 18:00



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 again the southern coastal end of the fire-ground. No further fire spread was experienced during Saturday or Sunday. Small flare ups near the perimeter were common and these were easily contained by helicopters. Thermal camera data gathered on Friday 16th, indicated a limited number of hotspots, these were extinguished over Saturday 17th and Sunday 18th of Feb. Over the weekend frews have cold trailed sectors along Alpha, Bravo, Charlie, Sierra and Xray. Further aerial reconnaissance on Monday the 19th showed a small number of hotspots in the centre of the burn 100m south of the Sierra sector fire line. These were extinguished by ground crews. On Westnesday the 21st of February 2018 aerial reconnaissance did not pick up any further hotspots, 20mm of rain has fallen this week.

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

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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 16th of Feb.

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 camera monitoring during the second week of the fire revealed a much higher number of hot areas than previously estimated. On Wednesday the 21st of February the fire perimeter was fully contained using ground crews and aircraft. Incident objectives have been changed to reflect the origining fire ground monitoring that will occur over the next two weeks.

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10. Prepared by: GLENN THOMPSON





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

 - 3. Minimise loss of property (especially properties along Waitangi Wharf Owenga Road)
 - 4. Minimise loss of other values. (especially Taiko Trust Ecological area, and Tuuta/Rangaika Reserve)
 - 5. To continue to monitor the fire ground until the 16th of March 2018.
 - 4. STRATEGY/ STRATEGIES: (Plan of Action to meet incident Objectives)
 - 1. Appoint a Safety Officer for the recommissioning ghting resources.
 - 2. Continue to liaise with all effected parties/agen on a regular basis.
 - 3. Monitor the fire ground using ground observat

Glenn Thompson



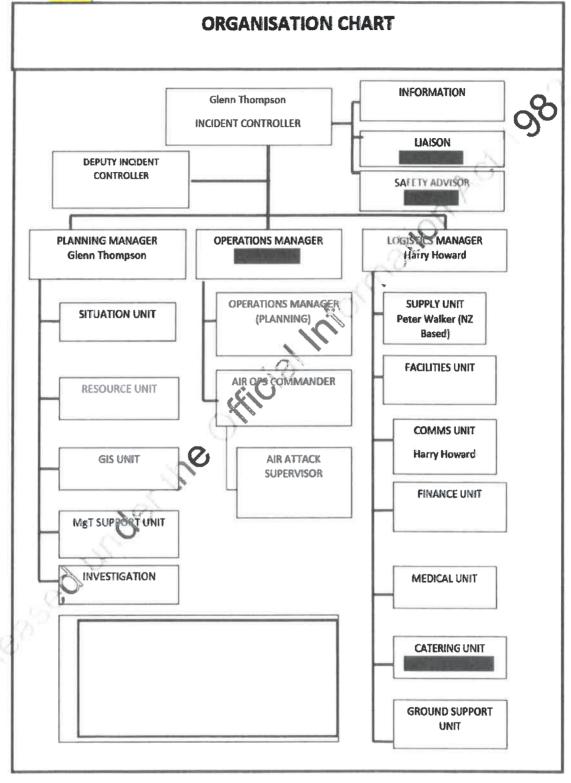
	ORGANISATIO	N LIST		
3. Incident Control		Phone	Cell Phone Rad	
Incident Controller	Glenn Thompson	H) (S)		Fire RPT 1
Safety Officer	LONE LINE	100		Fire RPT 1
Liaison Officer				FINERPT 1
4. Agency Representativ	re	Phone	Cell Phone Ra	dio Ch
Lead Agency	FENZ		1	Fire RPT 1
Agency	Chatham Islands Council	DER	0	
Agency	Enterprise Trust),	
i. Planning/Intel Section		Phone	Cell Phone	Radio Cl
Planning/Intel Manager	Glenn Thompson			Fire RP
Situations Unit	ζ.	0		
Resources Unit	Harry Howard	Total Control		Fire RP
i. Logistics Section	0	Phone	Cell Phon	e Radio Cl
Logistics Manager	Harry Howard			Fire RP
Supply Unit	Peter Waker (NZ based)		HARM	
Catering Unit				
Facilities Unit	6			
FinancerUnit				
Communications Unit				
Medical Unit				
7. Operations Section			î	Fire RP
Operations Manager	ALS: ALL	Biografia (1)		1
Sector Alpha Supervisor				
Sector Zulu Supervisor				



Sector Sierra Supervisor
Air Attack Supervisor

8. Prepared by: Glenn Thompson







3. Radio Channels	Francisco de	Channel	Francos	6.
Assigned To Command	Function Management	Channel VHF Fire 1	Frequency	SI
Tactical	Crew Coms	VHF Fire 1		10
1 dollous	Olow Comb			1
			:0	
			20	4
Radio channels versu Agency	us frequency for VHF Radio	Fire RPT 1 Channel		Comme
DOC	Base sets	Ch 30		
FENZ	DUAL Band	Zone A CH 15		
	J. J.	1		
	1/10	larry Howard		



		AIR OP	ERATIONS PL	AN	
3. Personnel an		nications Name	Affiliation	Phone	Radio Ch
Air Div. Comma	nder				
Air Attack Super	rvisor				*
Air Support Sup	ervisor				~O~
Lead Helicopter	Pilot				Υ -
Lead Fixed-Win	g Pilot			. (1)	
4. Air Resource Pilot Name/ Company	Assignmer Aircraf t Type	Reg or Call sign	Assignment	Victical Freq/Chan	Telephor Numbers
	illing Point ame	s/Service Areas	Grid	Reference	
6. Safety Notes	/ Hazards	/ Kadio Coverse	Figurations		
7. Air Operation	ns Special G	Edition or Service	ots for the return to	New Zealand	. Crews will
7. Air Operation	ns Special I e being pr ance if req	actip or Service		New Zealand	. Crews will



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.
- 4. Ensure instructions are given and
- 5. Obtain current information on fire status.
- 6. Remain in Communication w crew members, your supe and adjoining forces.
- Determine safer escape routes
- ns in potentially Establish looks hazardour situations.
- iffsontrol at all times
- dert, keep calm, think dearly, act decisively.

Watch out

- fire not scouted and sized up.
 In country not seen in daylight.
- Safety zones and escap routes not identified.
- Unfamiliar with avi ther and local factors influencing fire but laviour.
- Uninformed in arrategy, tactics and hazards.
- Instructions and assignments not clear.
- No orimunications link with crew members or visor.
- constructing fireline without safe anchor point. Constructing fireline downhill with fire below.
- 10. 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 -Crews briefed and monitoring for rapid change.

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

Slips, Trips and Fals – Crew briefed, made aware purposed Slips, Trips and Fals – Crew briefed 60kph speed limit, stock on road. - Crew briefed, made aware "punji sticks", cliffs, deep water and bogs.

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

Fuels and Foam - Correct handling and storage, crews briefed. Helicopters now fuelling

Poer communications - IMT to monitor radio

RLB - RCCNZ notified of Chatham Islands activity

Livestock wild bulls and pigs- Ground crews briefed

Off road driving (4x4 and LUV) - restricted to DOC and other qualified personnel.

Hygiene- Wash hands before eating and after toilet breaks

5. Prepared By:

Glenn Thompson



SECTOR ASSIGNMENTS NB- All sectors on one page. Affiliation 6. Operations Manager **Phone FENZ** 7. Resource Allocation Leader (s) Sector Crew / Resource # Persons Monitor by ground observation All sector hotspots Wellington Bryge Halaroft 8. Sector Assignment / Special Instructions **ALL** sectors . Dig out hot areas to cold earth vailable mix with water by poking nozzle right into the ground. all hot spots identified through ground based Continuation of extinguish reconnaissance. Develop and flag ground access Maintain reporting schedules, on commencement of work. edunder 9. Sector Communications Phone Radio Ch Fire 1 Operations Manager. **Air Attack Supervisor** Fire 1 **Safety Officer** 10. Prepared By:



MEDICAL PLAN

3. First Aid Station Name Point 106	Location Staging	Phone/Radio Channel Fire 1	Paramedics available at Station First Aiders			
Crew Leaders	Various sectors	Fire 1	First Aide	ers		
					-	
	Addre	Dh === /D==	41	D. di	V~	
4. Transportation Ambulance Service Air Operations (Emergency Evac only)	Addre	ess Phone/Rad Channel		e with Ar	nedics nbulance	
St John Ambulance	1 Hospital Road	PET VISION	Yes	7		
WestPac Rescue			Yas			
Life Flight			V			
			_			
łeli		(O)	ravel Time	Burr	-	
Chatham's 1 Ho Medical Centre	spital Road	Plane Road 20 min		Burr Unit No	Pad No	
Heli Hospital Name Chatham's 1 Ho	ocedures o statifise patients in (Cellington	Phone Road 20 min	Air I	Unit No	Pad	



WEATHER AND FIRE BEHAVIOUR PREDICTION

		Temp	RH	Rain mm	Wind Km/hr	Wind Dir	FFMC	ISI	Grass EROS 65%cured m/hr	Scrub EROS m
Thursday	22/02	21	75	5	30	NW	67	2.7	73	553 E
Friday	23/02	20	80	5	30	SW	61	2.0	46	378 E
Saturday	24/02	19	75	C	30	SW	61	2.8	82	606 E

Prepared By: Glenn Thompson

Updated forecast - 21 February 4:15 pm NZDT

Rest of today:

- NW 15-25 km/h. Gusts up to 40 km/h through the evening, then decreasing tonight.
- Temperature falling to near 17°C by midnight
- Relative humidity increasing to around 100% by midnight.
- · No rainfall expected.

Thursday (midnight to midnight):

- Wind NNW tending W late in the morning, then SW after 5:00 pm. Sustained 20-30 km/h in the morning, then 25-40 km/h in the afternoon and evening with gusts to 60 km/h possible, decreasing in the evening.
- Temperature near 18217°C in the morning increasing to near 21°C in the afternoon.
- Relative humidity near 95% early, decreasing to 70-75% in the afternoon.
- Chance or a couple showers early in the morning and again in the evening. Total rainfall 5 mm or less.
- Stight chance for visibility less than 1km before 8:00 am.

riday (midnight to midnight):

- Wind SW sustained 25-35 km/h with gusts to 60 km/h early in the afternoon and evening.
- Temperature near 15°C in the morning increasing to near 20°C in the afternoon.
- Relative humidity near 95% early, decreasing to 75% in the afternoon.
- Scattered showers possible in the afternoon and evening. Total rainfall 5 mm or less



Saturday outlook:



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