

CIMS Incident Management Organiser:

(RF200)

Situation Report

incident Name: Makara Fire - Chatham's Location; Southern Side of Chatham Island

Incident Number:

Incident Type: Vegetation Fire

Grid Reference:

Shift: 0800 -1800 4th Feb

Assessment: Current Situation Vegetation in scrub fuels with areas of Peat, started on the 1st Feb and ran until rain stopped the spread of fire on the night of the 2nd burning a total of around 3000ha. No further rain or fire spread was experienced during the day on Saturday

Action Taken: (Consider Progress)

Doc Crews have been marking and mapping access Local Machinery has mulched fuel breaks in Sector Sierra, for protection of structures Incident Management Team arrived and received briefing 3rd Feb. And completed familiarisation flight.

Factors: (Weather and other factors or limitation should be noted including resource status)

Moisture from the rain of Friday night will dry out and FFMC will rise to about 86 by Wednesday and

Access to some parts of the fireground will be time consuming.

Obtaining resources that are not available on the island will take 1-2 days to arrive.

Predicted incident Development: (Note how this situation is expected to evolve)

Perimeter growth on Sunday is unlikely with mild fire weather and aircraft available. In dryer windier conditions Monday-Thursday crews and aircraft may have difficulty containing flare-ups if several occur at the same time.

Incident Action Plan

Incident Objective / Aim: (Analyse and consider all options before setting plan to echieve desired outcome)

Ensure safety of all responders

Protect live

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)

Incident specific objectives: Contain the fire within current extent. Identify contingency plan should the fire not be able to be contained within the current extent.

Shift Specific objectives: Priority to be given to securing the perimeter in:

- Sierra Sector
- Alpha sector (starting at the intersection with Sierra).

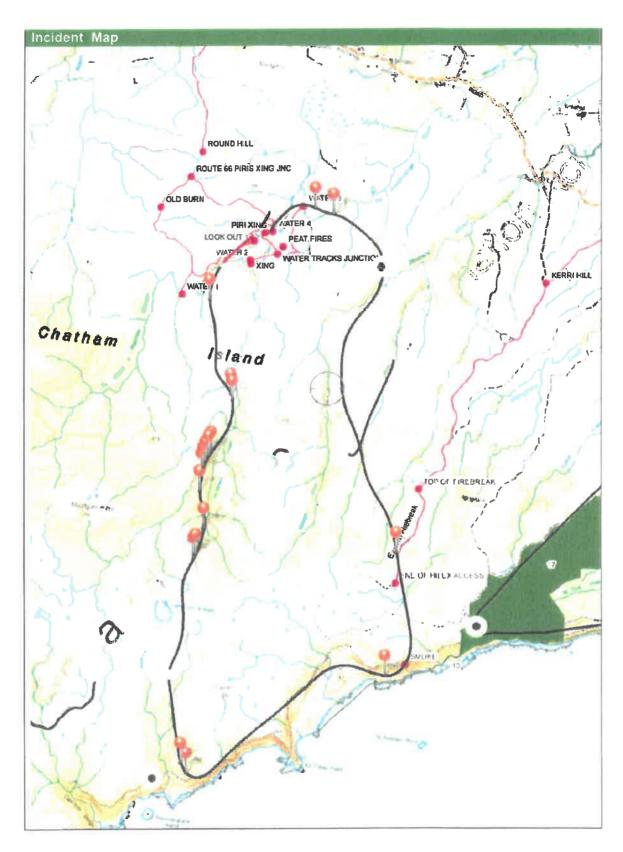
Strategy / Strategies: (Plan of Action to meet Incident Objective/ Aim)

Direct attack (contingencies which have yet to be developed may involve indirect attack.

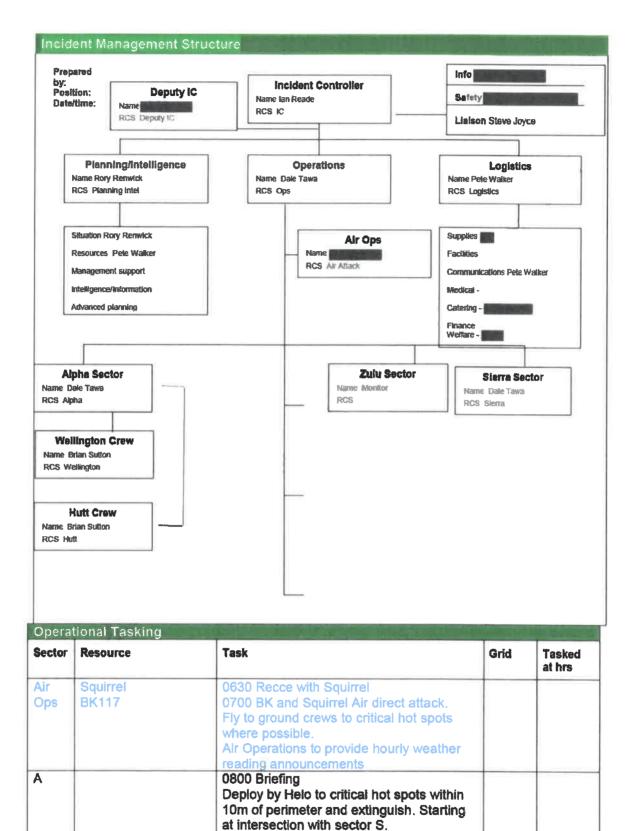
Tactics: (Specific actions to achieve incident strategy/s)

Secure the edges with a perimeter blacked out (cold) to a width of 10m, using ground crews with either hand tools or water, and backed up with aircraft.

	Period:4 th February Position: Planning			
Approved by: Ian Reade IC Signa	ture:			
Hints for Successful Incident Management: Keep records Plan shead	Situation Report: Prepared & Communicated: Time:			
Set up a Command and Control structure Delegate functions Devalop and update incident Action Plans	On Arrival + 1 hr + 2 hrs			
 Brief Personnel Sectorise the incident Give regular Situation Reports 	+ 3 hrs + 4 hrs			
 Plan Changeovers Have effective Communications Safety First, Every Job, Every time (L.A.C.E.S.) 	+ 5 hrs			



This Incident Management Organiser is prepared by the National Rural Fire Authority (Version 2008/1)



Provide hourly Sit Reps.

S		Identify future resource requirements to Operations by 1230. Complete Daily Sitrep 0800 Briefing Deploy by Helo to critical hot spots within 10m of perimeter and extinguish. Starting	
		at intersection with sector A. Provide hourly Sit Reps. Identify future resource requirements to Operations by 1230 Complete Daily Sitrep	
Z	No ground resources assigned	Air attack only	

Log of Ac	tions	Date:
Time		Initials
Completed to (All log entries a Sign off entries)	Dy:	o/

	cation Plan:
Command:	DOC CH 5
Tactical:	Simplex DOC 15
Support:	
Ground to Air.	VHF Fire 4
Air to Air:	Pliots to confirm

1. Incident Name Makara 3. First Aid Station Name Local		2. Operational Period Date 4/2/18 Time 0800 to 2000			MEDICAL PLAN		
		Phone/Radio Location Channel			Parámedics available at Station		
Point 106	Staging		Doc 5	5 First aiders			
Crew leaders	fireline			First	aiders		
4. Transportation Ambulance Service	Add	aress (*)	Phone/R Channe		Paran lable wi	nedics th Amb	ulance
St John Ambulance	1 Hospitāl	road	CAL	Yes			
Westapc rescue heli							
5. Hospitals Hospital Name,	Addı	ess	Phone	Trave Road	el Time Air	Burn Unit	Heli Pad
Chathams medical centre	1 hospital r	oad	LOSO.	20 mins	10 mins	No	No
6. Special Emergency Proced Medical centre will stabilise		ife flight is	dispatched fr	om Welling	ton		
7. Prepared By: Mike S	Sullivan		Date	/Time 3 rd F	eb 2230)hrs	
8. Reviewed by Safety Advis				/Time			



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INCIDENT ACTION PLAN The items checked below are included in the incident Action Plan								
	SITUATION REPORT INCIDENT OBJECTIVES & STRATOR ORGANISATION LIST ORGANISATION DIAGRAM COMMUNICATIONS PLAN AIR OPERATIONS PLAN SAFETY PLAN DIVISION ASSIGNMENT SECTOR ASSIGNMENT MEDICAL PLAN LOG FIRE MAP WEATHER FORECAST & MAPS FIRE BEHAVIOUR FORECAST FACILITIES LAYOUT							
Approved by Incident Contr	oiler:							
Name	Signed	Date/Time						
196116	1911000							
Ian REade								
	the state of the s							



SITUATION REPORT

3. Location

4. Vegetation

5. NZTM Grid Ref.

South Western end Chatham Island

Taneora Scrub / peat /

6. Assessment

Vegetation in Taneora 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 one structure and burning up to another, both near the southern coastal end of the fireground. No further rain or fire spread was experienced during the day on Saturday.

7. Action taken

Public was evacuated from Waitangi Wharf Owenga Road as a precaution on the evening of 2nd Feb. But 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

1st shift of NZ resources briefed and on fire ground

2 medium helicopters carrying out bucket work and crew transport on the 4th Feb – reducing the number of visible smokers around the perimeter.

Locals found to be mopping up around structures at the southern end of Zulu.

8. Factors

Approx 10mm rain fell Friday night followed by 1-2mm of rain Sunday morning

Access around fireground 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 2-3 days to arrive.

9. Predicted Incident Development

It is likely that current tactics will prevent further fire spread however forecast strong winds early week will dry out and increasing FFMC means there is a possibility of significant fire growth if multiple flare ups that may be more than current resources can contain.

10. Prepared by: RORY RENWICK



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)

Incident specific objectives: Contain the fire within current extent. Identify contingency plan should the fire not be able to be contained within the current extent.

Engage local stakeholder and landowners in planning and operational process incorporate local trained resource

Build local relationships and skill with the view to longer term future.

Shift Specific objectives: Priority to be given to securing the perimeter in Sierra and Alpha Start on shift contingency plans in the event the fire becomes active.

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

- Direct attack with aircraft on smoking veg fires in all 3 sectors, with priorities being:
 - Ensure perimeter is contained in Sierra, with action, evac lines established
 - Ensure perimeter is contained on the cliff face on the south of Zulu
- Ground crew mop up along Sierra and Alpha ensuring peat burning is extinguished.
- Ground crews to be backed up with bucket work and transportation from helicopters.
- Establish sustainable let A1 fuel deliveries to meet aircraft demands

5. Prepared by: Rory Renwick



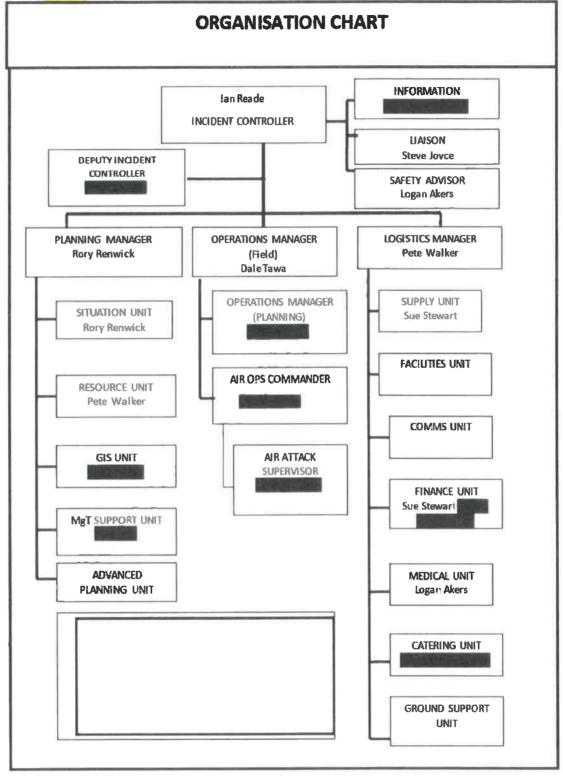
ORGANISATION LIST 3. Incident Control Phone Cell Phone Radio Ch Ian Reade Incident Controller Deputy IC Doc 5 Information Officer **Safety Officer** Steve Joyce Liaison Officer 4. Agency Representative Phone Cell Phone Radio Ch FENZ **Lead Agency** MCDEM Agency Agency Enterprise Trust Agency Cell Phone Radio Ch 5. Planning/Intel Section Phone Doc 5 Planning/Intel Manager Rory Renwick Situations Unit Resources Unit Pote Walker Doc 5 Doc 5 Management Support Unit Information Unit Advance Planning Unit **Technical Specialists Unit** 6. Logistics Section **Phone** Cell Phone Radio Ch Pete Walker Doc 5 **Logistics Manager** Sue Stewart **Supply Unit** Doc 5 **Catering Unit Facilities Unit** Finance Unit / Sue Stewart **Communications Unit** Medical Unit Logan Akers Doc 5



Makara Fire, Chatham Island. Shift period: 5th Feb 2018 0800-2000

7. Operations Section		Phone	Cell Phone Radio C
Operations Manager	Dale Tawa		Doc 5
Dep Ops / Dep Plan Manager	THE EAST		Doc 5
Sector Alpha Supervisor	Dale Tawa		
Sector Zulu Supervisor	Dale Tawa		
Sector Sierra Supervisor	Date Tawa		
Air Attack Supervisor	Blig Philip		Doc 5
Air Support Supervisor			
8. Prepared by:		lan Reade	







Assigned To	Function	Channel	Frequency	System
Command	Management	Doc 5		
Tactical	Tactics	Doc 15		
Ground to Air	Air Ops	Fire 4		
Air to Air	Pilots	119.1?		
4. Telephone Assigned To	Landline	Celiphone	Fax	Comments
6. Other (e.g. email,	Satphone, etc)		Î	



8. Prepared By:

AIR OPERATIONS PLAN 3. Personnel and Communications Radio Chan **Position Affiliation** Phone Name Contractor Fire 4 Air Div. Commander DOC 5 **Air Attack Supervisor** Air Support Supervisor Fire 4 **Lead Helicopter Pilot** Southern Helicopters DOC 5 **Lead Fixed-Wing Pilot** 4. Air Resource Assignments Tactical Freq/Chan Telephone Reg or **Numbers** Pilot Name/ Aircraft Callsign **Assignment** Type Company Sectors A, Z Fire 4 - Southern Squirrel **IMR** Helicopters - Garden HGU Fire 4 City 5. Location of Filling Points/Service Areas **Grid Reference** Name Various dipping points within fire ground Chatham Airport 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 Chathems staff to transfer fuel from their tanker to Helo's following CAA 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

- Fight fire aggressively but provide for safety first.
- Initiate all action based upon current and expected fire behaviour.
- Re cognise current weather
 conditions and obtain forecasts.
- Ensure instructions are given and understood.
- 5. Obtain current information on fire status.
- Remain in Communication with crew members, your supervisor and adjoining forces.
- Determine safetyzones and es cape routes.
- 8. Establish lookouts in potentially hazardous situations.
- 9. Retain control at all times.
- 10. Stayalert, keep calm, think clearly, act decisively.

Watchouts

- 1. Fire not scouted and sized up.
- 2. In country not seen in daylight.
- 3. Safety zones and escape routes not identified.
- Unfamiliar with weather and local factors influencing fire behaviour.
- 5. Uninformed on strategy, tactics and hazards.
- 6. Instructions and assignments not clear.
- No communications link with crew members or supervisor.
- 8. Constructing fireline without safe anchor point.
- 9. 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.
- 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

- 1.Peat bogs holes left by earlier peat fires
- 2.Livestock wild livestock in unfenced areas
- 3. Bees general and disturbing nests
- 4. Driving on the island Day hazards conditions of vehicles Night Hazards Livestock on roadways
- 5. Non-FENZ resources operating on the fire ground
- 6. Flight operations
- 7. Foam handling
- 8. Small crews operating long hours no relief.
- 9. Food and Hydration

5. Prepared By:



SECTOR ASSIGNMENT

3. Sector A	Sector 4. Description Direct attack on the Western Flank		
6. Sector Supervisor	Affiliation	Phone	Radio Ch
Dale Tawa	FENZ	PACTE .	DOC 5

7. Resources Assigned this period							
Resource/Crew	Leader	# Persons	Transport Required	Drop-off Point/time	Pickup Point/time		
Wellington		+4	Van	0800	1800		
Hutt	E SS	+4		0800	1800		

8. Sector Assignment / Special Instructions

- Continuation of perimeter containment to a width of 10m
- Establish drop points and provide details to GIS Dave Carlton
- Develop ground access and provide details to GIS Dave Carlton
- Maintain reporting schedules
- Re-deployment to other sectors determined by fire behaviour
- Provide recommendations to operations for future tasking and resourcing.
- Home safe

9. Sector Communications		Phone	Radio Ch
Operations Manager.	No. of the Control of		DOC5
Air Attack Supervisor	- ((A) * (a) + (b)		Fire 4
Safety Officer	Logan Akers		DOC5
10. Prepared By:	Dale Tawa		



	SE	CTOR ASS	SIGNMEN	T		
3. Sector	4. Description Eastern Flank				5. Div	ision Assigned
6. Sector Supervisor		Affiliation		Phone		Radio Ch
Dale Tawa		FENZ	1933	220		DOC 5
7. Resources Assigned			Transport	Drop		Pickup
Resource/Crew	Leader 	# Persons	Required	Point/	time	Point/time
Reactive activity.Locals n	ck on small pering e deployment to In this area. nay also be fire-f	neter smokers this sector (tas				f increased fire
9. Sector Communicat	ions			PH	one	Radio Ch
Division/Division Crr	ndr.					DOC5
Air Attack Supervi	sor les					Fire 4
Safety Offi	cer Logan Aker	S				DOC5
10. Prepared	By: Dale Tawa					



	SE	CTOR ASS	SIGNMEN	T		
3. Sector	4. Description Northern Perim	eter of Fire			5. Divi	sion Assigned
6. Sector Supervisor		Affiliation		Phone)~	Radio Ch
Dale Tawa		FENZ	2	100		DOC 5
7. Resources Assigned Resource/Crew	this period Leader	# Persons	Transport Required	Drop Point/		Pickup Point/time
Contractors	Fulton Hogan		-			
Hutt	15.00	+4		080	0	1800

8. Sector Assignment / Special Instructions

- Continuation of perimeter containment to a width of 10m
- Establish drop points and provide details to GIS Dave Carlton
- Develop ground access and provide details to GIS Dave Carlton
- Maintain reporting schedules
- Re-deployment to other sectors determined by fire behaviour
- Provide recommendations to operations for future tasking and resourcing. Home safe

If fire becomes active contractors with mulchers and graders will be engaged to establish structure protection fuel brakes.

9. Sector Communications		Phone	Radio Ch
Division/Division Cmdr.	Un Editor		DOC5
Air Attack Supervisor	Resettions.		Fire 4
Safety Officer	Logan Akers		DOC5
10. Prepared By:	Dale Tawa		



	ME	DICAL P	LAN			
3. First Aid Station			e/Radio			ramedics
Name Point 106	Location Staging	L DOC 5	mnel	First A	vailable at Viders	Station
Crew Leaders	Alpha Sector	DOC 5		-	Aiders	
5.5	1					
4. Transportation Ambulance Service Air Operations (Evac	Addr		hone/Ra mnel		f.	ramedics Ambulance
only) St John Ambulance	1 Hospital Road	becomin		Yes		
WestPac Rescue	1 montanio	BECOMMON!		Yes		
		1		1 172		
5. Hospitals Heli Hospital Name Chathams Medical Centre 6. Special Emergency Medical Centre utilised t Life Flight dispatched fro Check with Chathams Al	o stabilise patients om Wellington ir for Aircraft Movement	Phone S Advise Log	Road 20 min	Air 10 min	me Bu Unit No	Pad No
7. Prepared by Logisti Manager / Safety Offi 8. Reviewed by Incide Controller:	cer: LIA					



FIRE BEHAVIOUR PREDICTION

						Grass EROS	
		FFMC	Wind	Wind Dir	ISI	75%cured	Scrub EROS
Monday Morning	4/02/2018 4:00	70	35	NNW	3.6	326	830
Monday Afternoon	4/02/2018 16:00	85	41	NNW	16	1851	3500
Tuesday Morning	5/02/2018 4:00	70	35	NW	3.6	326	830
Tuesday afternoon	5/02/2018 16:00	83	35	wsw	9.4	858	2332
Wednesday Morning	6/02/2018 4:00	75	30	WSW	2.7	200	564
Wednesday afternoon	6/02/2018 16:00	83	25	wsw	4.4	405	1397
Thursday Morning	7/02/2018 4:00	75	15	WSW	1.6	Nil	Nil
Thursday afternoon	7/02/2018 16:00	85	15	WSW	4.5	168	1060

Prepared By: Rory Renwick



	LOG
Time.	Action
TITIO	Notivii



Incident Action Plan



1. Approved by Incident Controller:

Ian REade

Name Signed Date/Time



SITUATION REPORT

3. Location

4. Vegetation

5. NZTM Grid Ref.

South Western end Chatham Island

Taneora Scrub / peat /

6. Assessment

Vegetation in Taneora 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 one structure and burning up to another, both near the southern coastal end of the fireground. No further fire spread was experienced during Saturday Sunday or Monday.

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/Slerra, for protection of structures.

Main focus of ground crews has been Sierra sector and northern Edge of Alpha.

Two medium helicopters carrying out bucket work and crew transport on the 4th Feb – reducing the number of visible smokers around the perimeter, focussing on the currently inaccessible areas along the cliff face in Zulu.

A local crew has been found to be mopping up around structures at the southern end of Zulu, and have been provided with some PPE, and communications so they can call for assistance in the event of and incident.

Partial National Incident Management Team from NZ arrived midday on the 3rd Feb to assist with incident management.

8. Factors

Access around fireground 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.

9. Predicted Incident Development

It is likely that current tactics will prevent further fire spread however forecast strong shifty winds (from NW to SW) early week will dry out and increasing FFMC means there is a possibility of significant fire growth if multiple flare ups occur at the same time are more than current resources can contain.

10. Prepared by: RORY RENWICK



INCIDENT OBJECTIVES AND STRATEGIES

3. ENCIDENT OBJECTIVE(S)/AIM MISSION: (SMART, Specific, Measure abie, 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)

Incident specific objectives: Contain the fire within current extent.

Should a significant escape from current extents occur:

- Evacuate ahead of fire breakout to the north
- Minimise fire spread
- Defend Marae and power station as priority private property

Engage local stakeholder and landowners in planning and operational process

Incorporate local trained resource

Build local relationships and skill with the view to longer term future.

Shift Specific objectives: Priority to be given to securing the perimeter in Sierra ahead of SW wind change in the late afternoon.

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

To contain to current extents.

- Direct attack with aircraft on smoking veg fires in all 3 sectors, with priorities being:
- Ensure perimeter is contained in Sierra, with action, evac lines established
- Ensure perimeter is contained on the cliff face on the south of Zulu
- Ground crew mop up along perimeter of Sierra ensuring peat burning is extinguished.
- . Ground crews to be backed up with bucket work and transportation from helicopters.

Contingency should a significant escape occur incorporated into a predetermined response plan.

- Direct attack on flanks and indirect on head
- Defensive structure protection
- Evacuate ahead of the fire

5. Prepared by: Rory Renwick



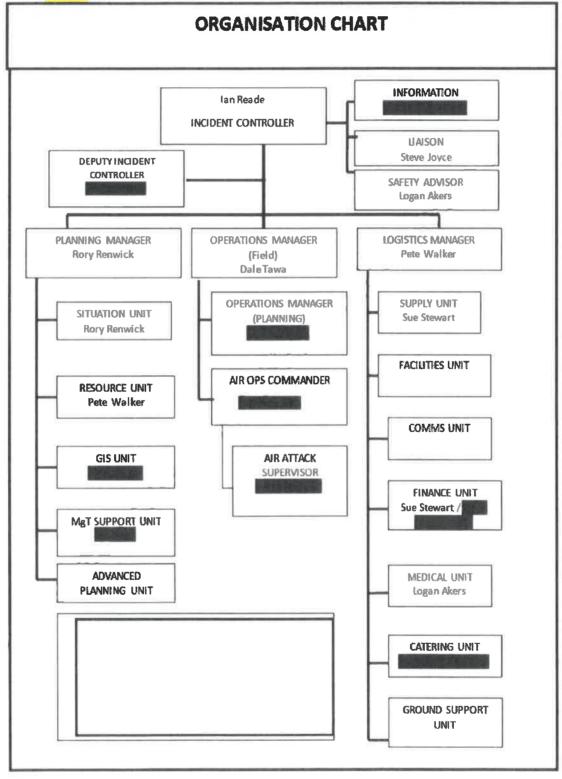
	ORGANISATION I	IST		
3. Incident Control		Phone	Cell Phone Rac	lio Ch
Incident Controller	lan Reade	3 I		Doc 5
Deputy IC				Doc 5
Information Officer	- Ca1048			Doc 5
Safety Officer	Logan Akers	BEAR		Doc 5
Liaison Officer	Steve Jayce			Doc 5
4. Agency Representati	ve	Phone	Cell Phone Rac	dio Ch
Lead Agency	FENZ			Doc 5
Agency	MCDEM	katil		
Agency	Enterprise Trust			
Agency				
5. Planning/Intel Section	100	Phone	Cell Phone	Radio C
Planning/Intel Manager	RoryRenwick	1765		Doc 5
Situations Unit	Rory Renwick			
Resources Unit	Pete Walker	0.43		Doc 5
Management Support Unit	E M	10.30		Doc 5
Information Unit	¥			
Advance Planning Unit				
Technical Specialists Unit				
5. Logistics Section		Phone	Cell Phon	e Radio Cl
Logistics Manager	Pete Walker	HARRY I		Doc 5
Supply Unit	Sue Stewart		10 1 (10)	
Catering Unit	A EULD H	Cauch		Doc 5
Facilities Unit				
Finance Unit	/ Sue Stewart		binki	
Communications Unit				
Medical Unit	Logan Akers			Doc 5



Makara Fire, Chatham Island. Shift period: 6th Feb 2018 0800-2000

7. Operations Section		Phone	Cell Phone	Radio Ch
Operations Manager	Dale Tawa			Doc 5
Dep Ops / Dep Plan Manager	141.31.4	2.5		Doc 5
Sector Alpha Supervisor	Dale Tawa			
Sector Zulu Supervisor	DaleTawa			
Sector Sierra Supervisor	Dale Tawa			
Air Attack Supervisor	de la little	1.00		Doc 5
Air Support Supervisor				
8. Prepared by:		Ian Reade		







	COM	MUNICATIONS	PLAN	
3. Radio Channels Assigned To	Function	Channel	Frequency	System
Command	Management	Doc 5		
Tactical	Tactics	Doc 15		
Ground to Air	Air Ops	Fire 4		
Air to Air	Pilots	119.1		
4. Telephone Assigned To	Landline	Celiphone F	Fanc C	Comments
C Ohbarda a amail	Saturbana atal	, .		
6. Other (e.g. email, Began unit available fo phone redundancy	. , ,			
7. Prepared by:		Peter Walker		



AIR OPERATIONS PLAN

Position		Name	Affiliation	n Phone	Radio Chan
Air Div. Comman	der		Contractor		Fire 4 DOC 5
Air Attack Superv	risor				
Air Support Supe	rvisor				
Lead Helicopter (Pilot	3118	Southern Helicopter	s	Fire 4 DOC 5
ead Fixed-Wing	Pilot				
Pilot Name/ Company	Aircraft Type Squirrel	Reg or Callsign	Assignment Sectors A, Z	Tactical Freq/Cl	nan Telephone Numbers
Southern Helicopters - Garden	B3	HGU	1	Fire 4	
Helicopters - Garden City 5. Location of Fil Na Chatham Airport	B3 Hing Points	/Service Areas	dipping points wit	Grid Reference	
Garden City 5. Location of Fil Na Chatham Airport 6. Safety Notes Power lin	Big Points, ame / Hazards	/Service Areas Various Radio Coverage East West on Ound, Normal airpo	dipping points wite Limitations wenga Road, Sma	Grid Reference	



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 behaviour.
- 3. Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood.
- 5. Obtain current information on fire status.
- Remain in Communication with crew members, your supervisor and a dioming forces.
- 7. Determine safetyzones and escape routes.
- 8. Establish lookouts in potentially hazardous situations.
- 9. Retain control at all times.
- 10. Stay alert, keep colm, think clearly, act decisively.

Watchouts

- 1. Fire not scouted and sized up.
- 2. In country not seen in daylight.
- 3. Safety zones and escape routes not identified.
- Unfamiliar with weather and local factors influencing fire behaviour.
- 5. Uninformed on strategy, tactics and hazards.
- 6. Instructions and assignments not clear.
- No communications link with crew members or supervisor.
- 8. Constructing fireline without safe anchor point.
- 9. Constructing fireline downhill with fire below.
- 10. Attempting frontalassault on fire.
- 11. Unburned fuel between you and the fire.
- 12. Cannot seemain 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. Gettingfrequent spot fires across the line.
- Terra in and fuels make escape to safety zones difficult.
- 18. Taking a nap near the fire line.

4. Specific Safety Points

- 1.Peat bogs holes left by earlier peat fires
- 2. Livestock wild livestock in unfenced areas
- 3.Bees general and disturbing nests
- 4. Driving on the island Day hazards conditions of vehicles Night Hazards Livestock on roadways
- 5. Non-FENZ resources operating on the fire ground
- 6. Flight operations
- 7. Foam handling
- 8. Small crews operating long hours no relief.
- 9. Food and Hydration

5. Prepared By:



10. Prepared By: Dale Tawa

SECTOR ASSIGNMENT 5. Division Assigned 3. Sector 4. Description Alpha Direct attack on the Western Flank Radio Ch **Affiliation** Phone 6. Sector Supervisor **FENZ** DOC 5 Dale Tawa 7. Resources Assigned this period Pickup **Transport** Drop-off Point/time Resource/Crew Leader # Persons Required Point/time 8. Sector Assignment / Special Instructions • Continuation of perimeter containment • Establish drop points and GPS • Develop and flag ground access • Maintain reporting schedules • Re-deployment to other sectors determined by fire behaviour Home safe Radio Ch 9. Sector Communications Phone Operations Manager. DOC5 Air Attack Supervisor Fire 4 DOC5 Safety Officer Logan Akers



10. Prepared By:

Dale Tawa

SECTOR ASSIGNMENT 5. Division Assigned 3. Sector 4. Description Zulu Eastern Flank **Affiliation** Phone Radio Ch 6. Sector Supervisor **FENZ** DOC 5 Dale Tawa 7. Resources Assigned this period **Transport** Drop-off. Pickup Resource/Crew Leader # Persons Required Point/time Point/time 8. Sector Assignment / Special Instructions • Air attack on small perimeter smokers • Reactive deployment to this sector (tasking the same as Sierra) in event of increased Awatapu land owners operating in southern part of Zulu sector 9. Sector Communications Radio Ch Phone DOC5 **Operations Manager** Air Attack Supervisor Fire 4 DOC5 Safety Officer Logan Akers



SECTOR ASSIGNMENT							
3. Sector	4. Description	Description			5. Division Assigned		
Sierra	Northern Perimeter of Fire						
6. Sector Supervisor	Affiliation			Phone		Radio Ch	
Dale Tawa		FENZ	8			DOC 5	
7. Resources Assigned	this period			- 0	-		
Resource/Crew	Leader	# Persons	Transport Required	Drop- Point/t		Pickup Point/time	
Wellington		+5	Van	080	0	1800	
Hutt		5		080	0	1800	

8. Sector Assignment / Special Instructions

- Continuation of perimeter containment to a width of 10 meters
- Establish drop points and provide details to GIS (Dave Carlton)
- Develop ground access and provide details to GIS (Dave Cariton)
- Maintain reporting schedules
- Provide recommendations to Operations for future tasking and resourcing NLT 1300hrs
- Redeployment to other sectors determined by fire behaviour
- Home safe
- Trigger point activation will require reassignment following predetermined response plan

, Sector Communications	Phone	Radio Ch
Operations Manager.		DOC5
Air Attack Supervisor		Fire 4
Safety Officer Logan Akers		DOC5
10. Prepared By: Dale Tawa	Dale Tawa	



Makara Fire, Chathem Island. Shift period: 6th Feb 2018 0800-2000

3. Sector	4. Description				5. Divi:	sion Assigned
Sierra	Predetermined (Contingency R	esponse Plan			
Dale Tawa		FENZ	101			DOC 5
7. Resources Assigned	l this period					- 411.4
Resource/Crew	Leader	# Persons	Transport Required	Drop-o Point/ti		Pickup Point/time
AirOps	13-1	1 x Squirrel				
		1 x 83				
Ground Crews	6.3	2 x 5-man crew				
Waitangi Fire Brigade	Steve Joyce	2 x Appliances				

8. Sector Assignment / Special Instructions

Resources to redeploy as above in the event of fire escape

- Breach of trigger point 1 requires all assets are directed towards structure protection
- Priority to houses on southern side of Waltangi Owenga Road between Kopinga Marae and Te Matarae Road
- Structures require four-meter foam fire break around houses
- Helos will be deployed subject to fire behaviour and fire front direction
- Breach of trigger point 2 requires immediate deployment of all assets to protection of sub-station and Kopinga Marae

3. Sector Communications	Phone	Radio Ch
Operations Manager		DOC5
Air Attack Supervisor		Fire 4
Safety Officer Logan Akers		DOC5
10. Prepared By: Dale Tawa	·	



MEDICAL PLAN					
3. First Aid Station Name	Location	Phone/Radio Channel	Paramedics available at Station		
Point 106 Staging		DOC 5	First Aiders		
Crew Leaders	Alpha Sector	DOC 5	First Aiders		
4. Transportation Ambulance Service	Addr	ess Phone/Rad Channel	lio Paramedics available with Ambulance		
Air Operations (Evaconly)					
St John Ambulance	1 Hospital Road	S. Carl	Yes		
WestPac Rescue			Yes		
6. Special Emergence Medical Centre utilised Life Flight dispatched Check with Chathams STAFF WITH KNOWN	I to stabilise patients from Wellington Air for Aircraft Movement MEDICAL CONDITIONS:	Phone Road 20 min	Air Unit Pad 10 No No min		
7. Prepared by Logi Manager / Safety O					
8. Reviewed by Inci Controller:	dent				



WEATHER AND FIRE BEHAVIOUR PREDICTION

	Scrub EROS m/hr	830	2550	564	1397	Negligible	1060	Negligible	1060
Grass EROS 75%cured	m/hr	326	066	200	405	Negligible	168	Negligible	168
	S	9.6	9.4	2.7	4.4	1.6	4.5	v-l	4.5
	WindDir	AN.	WN	WSW	*	WSW	WSW	SW	SW
Wind	Km/hr	Ж	37	8	56	15	21	93	15
	Æ		9		23		26		8
	Тетр		23		18		21		21
		6/02/2018 4:00	6/02/2018 16:00	7/02/2018 4:00	7/02/2018 16:00	8/02/2018 4:00	8/02/2018 16:00	8/02/2018 4:00	8/02/2018 16:00
		Tuesday Morning	Tuesday afternoon	Wednesday Morning	Wednesday afternoon	Thursday Morning	Thursday afternoon	Friday Moming	Friday afternoon

Prepared By: Rory Renwick



	LOG					
	# A*					
Time.	Action					



Incident Action Plan



edunder

1 Approved by Incident Controller:

Signed

Date/Time

lan Reade



SITUATION REPORT

3. Location

4. Vegetation

5. NZTM Grid Ref.

South Western end Chatham Island

Taneora Scrub / peat /

6. Assessment

Vegetation in Tarahina scrub fuels with areas of Peat, started on the 1st Feb and ran with rain stopped the spread of fire late on the night of the 2nd burning a total of around 2449 hadestroying one structure and burning up to another, both near the southern coastal end of the fireground. No further fire spread was experienced during Saturday Sunday. On Monday 4th there were a few flare ups near the perimeter but crews and helicopters were able to contain these Conditions on Tuesday were mild due to morning rain reducing fire activity.

7. Action taken

Public was evacuated from Waitangi Wharf Owenga Road (\$ 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.

Main focus of ground crews has been Sierra secon and northern Edge of Alpha.

Two medium helicopters carrying out bucket work and crew transport on the 4th Feb – reducing the number of visible smokers around the periodeer, focussing on the currently inaccessible areas along the cliff face in Zulu.

A local crew has been found to be mopping up around structures at the southern end of Zulu, and have been provided with some APE, and communications so they can call for assistance in the event of and incident.

Partial National Incident Management Team from NZ arrived midday on the 3rd Feb to assist with incident management.

8. Factors

Access around fireground 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.

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

9. Predicted Incident Development

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

10. Prepared by: RORY RENWICK





INCIDENT OBJECTIVES AND STRATEGIES

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

General Ensure safety of all responders

Minimise loss of other values. (especially Taiko Trust Ecological area, and Tuuta/Rangaika Reserve)

Specific objectives

To secure the entire perimeter by the 12th February. Secure perimeter being defined as

- Targeted extinguishment of all burning material within 10-30m of perime from a helicopter or drone by thermal camera and areas where canopy does and
- Cold trail and black out perimeter to a width 20m in Sierra Sec obscures the view of the ground from the air.

Then patrol on days of elevated fire danger, until significant rain

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

To contain to current extents.

- Direct attack with aircraft on 51 es in all 3 sectors, with priorities being:
- with action, evac lines established Ensure perimeter is contained
- e cliff face on the south of Zulu
- er of Sierra ensuring peat burning is extinguished. Ground crew mon up alor
- by up with bucket work and transportation from helicopters.

escape occur incorporated into a predetermined response plan.

- and indirect on head
- d of the fire

5. Prepared by: Rory Renwick





ORGANISATION LIST 3. Incident Control Phone Cell Phone Radio Ch **Incident Controller** Deputy IC Steve Jayce Information Officer **Safety Officer** Liaison Officer Cell Phone Radio Ch 4. Agency Representative Lead Agency Agency Agency Agency Phone Cell Phone Radio Ch 5. Planning/Intel Section Doc 5 Planning/Intel Manager **Situations Unit** Resources Unit Pete Waller Doc 5 Management Support Unit Doc 5 Information Unit Technical Specialists Unit 6. Logistics Section Phone Cell Phone Radio Ch Logistics Manager Doc 5 **Supply Unit** Catering Unit Doc 5 **Facilities Unit** Finance Unit Communications Unit Peter Walker Medical Unit Logan Akers Doc 5

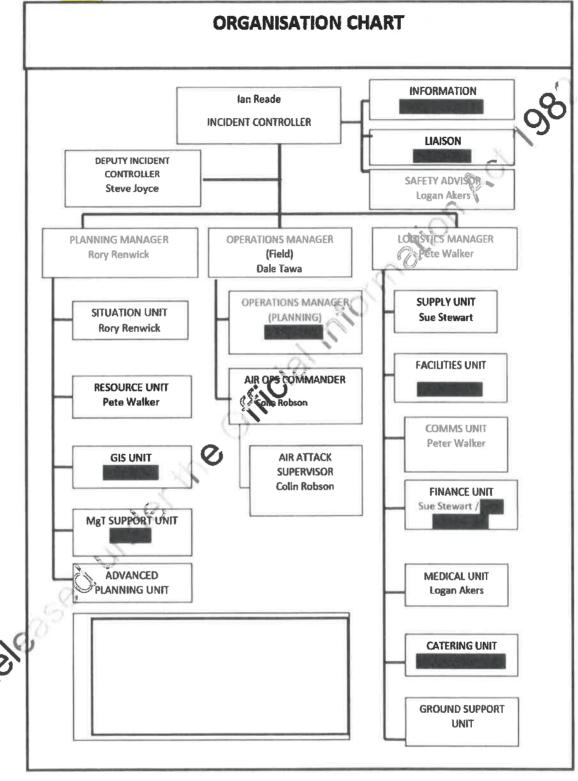


Makara Fire, Chatham Island. Shift period: 7th Feb 2018 0800-2000

7. Operations Section		Phone	Cell Phone	Radio Ch
Operations Manager		870		Doc 5
Dep Ops / Dep Plan Manager				Doc 5
Sector Alpha Supervisor	Dale Tawa			_G-
Sector Zulu Supervisor	Dale Tawa			()
Sector Sierra Supervisor	Dale Tawa		14.	
Air Attack Supervisor	Colin Robinson	113	C	Doc 5
Air Support Supervisor				
8. Prepared by:		Ian Reade	<u> </u>	

Paleased under Released under







3. Radio Channels Assigned To	Function	Channel	Frequency	
Command	Management	Doc 5		×
Tactical	Tactics	Doc 15		6-7
Ground to Air	Air Ops	Fire 4	_	
Air to Air	Pilots	119.1	*60.	
			200	
			10,	
4. Telephone Assigned To	Landline	Celiphone	Fax	Com
		- 1/2		
		· · · · ·		
6. Other (e.g. email,				
Began unit available fo phone redundancy	r internet and			
	1/1			
	0			
7. Prepared by:)-	Peter Walker		



AIR OPERATIONS PLAN

3. Personnel and Communications					
Name	Affiliation	Phone	Radio Chan		
Colin Robson	FENZ - Wellington		Fire 4		
			0		
			1		
STALUI	Southern		Fire 4		
	Helicopters	Ujy	DOC 5		
	Name	Name Affiliation Colin Robson FENZ - Wellington Southern	Name Affiliation Phone Colin Robson FENZ - Wellington Southern		

4. Air Resource Assignments

Pilot Name/ Company	Aircraf t Type	Reg or Callsign	Assignment	Tactical Freq/Chan	Telephone Numbers
- Southern Helicopters	Squirrel B3	IMR	Sectors A,Z, Redeployment of ground	Fire 4	
- Garden City		HGU	crews for structure protection on activation of thinger points	Fire 4	

5. Location of Filling Points/Service Areas

Name

Grid 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 airport from Pitt Island. Normal airport operations domestic from Tuuta airfield. 0600 thermal flight with Jamie

7. Air Operations Special Equip or Service

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

8. Prepared By: Colin Robson





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 crew members, your super and adjoining forces.
- Determine safety nones and escape routes
- Establish tookouts in potentially hazardous situations.
- Retain sontrol at all times.
- 10. Stay Men, keep calm, think

Watchout

- Fire not scouted and sized up

- In country not seen in baylight.
 Safety zones and excape routes not identified.
 Unfamiliar with sweather and local factors influencing fire Dehaviour.
- Uninformed on strategy, tactics and hazards.
- Instructions and assignments not clear.
- No communications link with crew members or supervisor.
- constructing fireline without safe anchor point,
- Constructing fireline without sate ancross per constructing fireline downhill with fire below. WO.
- 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

Fatigue - Crew Boss to

Slips and Falls — Cem briefings

Air Operations -Frew briefings, pilots and Air Ops monitoring

Weather Crew boss and pilots to monitor - Rapid changes, electrical storms (hypo, hyper)

Hi personnel briefed

of Crews advised - ground crews supplied PPE and monitor

Pols and Foam - Correct handling and storage - crews briefed

oor communications — particularly Alpha and Sierra — air ops to manitor radio

PLB - RCCNZ notified of Chatham Islands activity

Peat Bog – ground crews briefed

Livestock / Bees - Ground crews briefed

Non FENZ resources - Operating on the fire ground. Assistance provided, welfare monitored

5. Prepared By:

Logan Akers





Dale Tawa

SECTOR ASSIGNMENT

3. Sector	4. Description	5. Division Assigned
Alpha	Direct attack on the Western Flank	Q ₁

6. Sector Supervisor Affiliation Photo

Phone Radio ch

Γ	7. Resources Assigned th	is period				0
l				Transport	Drop-off	
ı	Resource/Crew	Leader	# Persons	Required	Point/time	Point/time
ľ	Wellington	ALLS:	+5	Van	9800	1800
ľ	Hutt		5		0800	1800

8. Sector Assignment / Special Instructions

• Hutt Crew working in southern part of sector under canopy

FENZ

- Wellington working in central part of sector under canopy
- Continuation of perimeter containment
- Establish drop points and GPS
- Develop and flag ground access
- Maintain reporting schedules
- Re-deployment to other sectors determined by fire behaviour
- Home safe

9. Sector Communications	100	Phone	Radio Ch
Operations Manage			DOC5
0 (14)	Colin Robinson		Fire 4
Safety Officer	Logan Akers		DOC5
40. Prepared By:	Dale Tawa		



Prepared By:

Dale Tawa

SECTOR ASSIGNMENT 5. Division As 3. Sector 4. Description Zulu Eastern Flank 6. Sector Supervisor **Affiliation** Phone Radio Ch DOC 5 **Dale Tawa FENZ** 7. Resources Assigned this period **Transport** Pickup Required Point/time Resource/Crew Leader # Persons 2x2 Seater DOC Crew Binney LUV 8. Sector Assignment / Special Instructions · Air attack on small perimeter smoker Reactive deployment to this sector, the same as Sierra) in event of increased fire activity neouthern part of Zulu sector Awatapu land owners operating wisting fire break in western sector to high point DOC to GPS track access feature 205 in grid sq DOC identify suitable oints within fireground and clear Heli pads if required and provide co-ordina DOC to route many all access for LUV within fireground boundaries and map. 9. Sector Communications Radio Ch Phone Operations Manager DOC5 Air Attack 90 Colin Robinson Fire 4 Safety Officer Logan Akers DOC5



SECTOR ASSIGNMENT 3. Sector 4. Description Sierra Northern Perimeter of Fire Radio Ch **Affiliation** Phone 6. Sector Supervisor **FENZ** DOC 5 Dale Tawa 7. Resources Assigned this period Pickup Drop-off Transport Point/time Point/time Resource/Crew Leader # Persons 8. Sector Assignment / Special Instructions Continuation of perimeter containment to a width or 10 meters. at to a width of 10 meters Establish drop points and pro- Develop ground access and a wide details to GIS (Dave Carlton) Maintain reporting sc Operations for future tasking and resourcing NLT Provide recommendation 1300hrs other sectors determined by fire behaviour Redeployment tivation will require reassignment following predetermined response Trigger point a 9. Sector Communications Radio Ch Phone DOC5 tions Manager. Fire 4 Colin Robinson Air Attack Supervisor DOC5 **Safety Officer** Logan Akers 10. Prepared By: Dale Tawa



SECTOR ASSIGNMENT 5. Division Assigned 4. Description 3. Sector **Predetermined Contingency Response Plan** DOC 5 Dale Tawa **FENZ** 7. Resources Assigned this period Pickup Transport Required* Point/time Resource/Crew Leader # Persons Colin Robson 1 x Squirrel Air Ops 1 x B3 2 x 5-man crew **Ground Crews** 2 x Appliances Waitangi Fire Brigade

8. Sector Assignment / Special Instructions

Resources to redeploy as above in the event of fire escape

 Breach of trigger point 1 requires withdrawal of ground crews and redeployment towards structure protection

WAITANGI OWENGA ROAD EVACUATION DETAIL.

Trigger Point 1.

Allowing 10L foam concentrate / property starting nearest breach and on the south side of the road, ignoring 2 X unsafetimable identified properties

1420 - behind 2 fire breaks - protect only if fire crosses first fire break.

1028 - defendable grass surround

834 - wet grass area behind sheds if owner is unable to harrow/mulch ground

798 - HIGHRISK - Do not commit crews - Foam dump from air

756 - defendable grass surround

Trigger Point 2.

Caratham Island Urban respond to Power Station

1 Helo to defend Generators

1 Helo to protect transmission lines

Ground crews redirected to Kopinga with Fulton Hogan

9. Sector Communications		Phone	Radio Ch
Operations Manager			DOC5
Air Attack Supervisor	Colin Robinson		Fire 4
Safety Officer	Logan Akers		DOC5
10. Prepared By:	Dale Tawa		



SECTOR ASSIGNMENT

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

Logan Akers FENZ DOC

7. Resources Assigned	this period		Transport	Diepos	Pickup
Resource/Crew	Leader	# Persons	Required		Point/time
Air Ops	Colin Robson	1 x Squirrel 1 x B3		100	
Ground Crews		2 x 5-man crew	34		
Waitangi Fire Brigade	Steve Joyce	2 x Appliances	0		

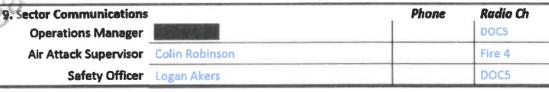
8. Sector Assignment / Special Instructions

Injury Accident Contingency

- Provide First Aid
- Pass Priority message requesting assistance
- 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 seturning 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 location of effected aircraft.
- If necessary, Pass Priority Massage before landing to render immediate assistance or diverting to pick up nearest Fire Crew resources and returning to scene.
 Advice Incident Controller of aircraft incident.









MEDICAL PLAN

		Phone/Radio		Paramedics
Name	Location	Channel	90	le at Station
Point 106	Staging	DOC.5	First Aiders	
Crew Leaders	Alpha Sector	DOC 5	First Aiders	
		-		
				0
4. Transportation	Addr	ess Phone/Rad Channel	lio • available	Paramedics with Ambulance
Ambulance Service Air Operations	Î	Cnanner		gin Ambulanci
Emergency Evac only)			.60	
St John Ambulance	1 Hospital Road		Yes	
WestPac Rescue			Yes	
Life Flight		1//		
are region		1.00		
5. Hospitals Heli Hospital Name	Address	Prione Road	ravel Time Air Un	1
	ospital Road	20 min	10 No	o No
Centro		111311	(1111)	
Centre	110			
Sentre 5. Special Emergency Promotion Centre utilised to the Life Flight dispatched from the Check with Chathans Are in STAFF WITH MYSTEN MED	kalvilse patients Wellington		oger	



Shift period 7) Feb 2018 0800-2000				Scrub EROS m/hr	564	1950	Negligible	1060	Negligible	1060
Makara Shift period			Grass EROS 75%cured	m/hr	200	650	Negligible	168	Negligible	168
	ICTION O			25	2.7	7.8	1.6	4.5	-	4.5
	R PRED	2 (S	FFMC	70	90 1U	70	50	70	50 C
	AVIOU		-	Wind Dir	WSW .	×	WSW	WSW	MS	MS
	AND FIRE BEHAVIOUR PREDICTIO		Wind	Km/hr	30	26 0	133	15	10	15
	AND F			Ŧ.		65		09	9	09
	WEATHER /			Temp		20		21		22
	8				7/02/2018 4:00	7/02/2018 16:00	8/02/2018 4:00	8/02/2018 16:00	8/02/2018 4:00	8/02/2018 16:00
FIRE					Wednesday Morning	Wednesday afternoon	Thursday Morning	Thursday afternoon	Friday Morning	Friday afternoon

Prepared By: Rony Renwick

Poscolo



Updated forecast - 6 February 4:00 pm NZDT

Through to midnight Tuesday:

- Wind SW to WSW. Sustained wind speeds 30-40 km/h with gusts to 60 km/h through to 8 pm, thereafter easing to 20-35 km/h with gusts up to 50 km/h.
- Temperature falling to near 11 degrees by midnight.
- Humidity decreasing from 90-95% to near 70%, before increasing again after sunsetting real 85% by midnight.
- An odd shower possible. Rainfall, if any, less than 2 mm.

Wednesday (midnight to midnight):

- Sustained winds W to SW through to sunrise, tending more SW after sunrise. Sustained at 20-30 km/h, with gusts up to 50 km/h to near 6 pm, eaching to 10-25 km/h with gusts to 35 km/h after 6 pm.
- Early morning minimum temperature 11 degrees, increasing to near 20 degrees in the
 afternoon.
- Early morning maximum humidity near 90%, falling to 65% in the afternoon, then returning to near 90% by midnight.
- Slight chance of a shower, otherwise was rainfall less than 2 mm.

Thursday (midnight to midnight)

- Wind S to SW tending more S'ly near 6 am, then WSW to WNW from near midday to near 6
 pm, thereafter besonging NNW to NE through to midnight. Sustained winds 20 km/h or less,
 with gusts to 50 m/h.
- Early morning minimum temperature 11-12 degrees, increasing to 20-21 degrees in the
 afternoon.
- Early marking maximum humidity near 85-90%, falling to 60% in the afternoon.
- Slight chance of a shower, otherwise dry. Any rainfall less than 2 mm.

ut bok for Friday

- Winds N to NW, sustained 25 km/h or less,
- Maximum temperatures 22-23 degrees.
- Minimum relative humidity to 60%.
- Dry to mainly dry weather expected.



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2	



Incident Action Plan



1. Approved by incident Controller:

Signed

Date/Time





SITUATION REPORT

3. Location

South Western end Chatham Island

4. Vegetation

Taneora Scrub / peat /

5. NZTM Grid Ref.

6. Assessment

Vegetation in Tarahina scrub fuels with areas of Peat, started on the 1st Feb and ran untificin stopped the spread of fire late on the night of the 2nd burning a total of around 2446ba testroying one structure and burning up to another, both near the southern coastal end of the freground. No further fire spread was experienced during Saturday Sunday. On Monday 4th and Wednesday the 5th there were a few flare ups near the perimeter but crews and helicopters were able to contain these

7. Action taken

Public was evacuated from Waitangi Wharf Owenga Road as a specaution 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 Zulo Sierra, for protection of structures.

Main focus of ground crews has been Sierra sector and northern Edge of Alpha.

Two medium helicopters carrying out buckel work and crew transport on the 4th Feb – reducing the number of visible smokers around the perinater, focussing on the currently inaccessible areas along the cliff face in Zulu.

A local crew has done considerable mopping up around structures at the southern end of Zulu, and have been provided with some RNE and communications so they can call for assistance in the event of and incident.

Partial National Incident Management Team from NZ arrived midday on the 3rd Feb to assist with incident management.

8. Factors

Access around fireground 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.

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

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.

10. Prepared by: RORY RENWICK





INCIDENT OBJECTIVES AND STRATEGIES

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

General 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 by the 12th February. Secure perimeter being defined as:

- Targeted extinguishment of all burning material within 10-30m of perimeter that can be detected from a helicopter or drone by thermal camera in areas where canopy does not obscure view of the ground and
- Cold trail and black out perimeter to a width 20m in Sierra Sector and areas where the canopy obscures the view of the ground from the air.

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

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

Direct attack with ground crews and aircraft

Establish ground access to centre of fire for LUVs and 4x4

Establish landing zones for crew access by helicophe

Map hotspots with thermal camera from helicopter.

Maintain at least two NZ crews and one helicopter on island until Sierra is secure and good access has been established to all area.

5. Prepared by: Rory Renwick



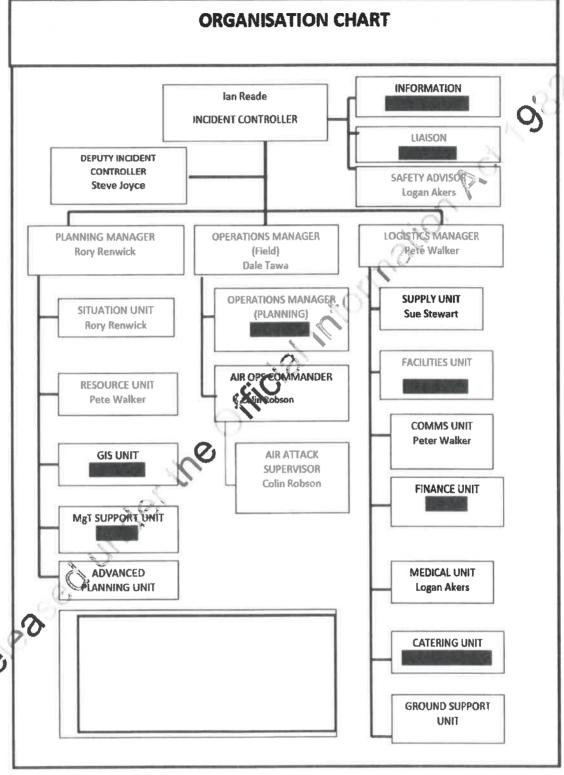


	ORGANISATION I	LIST		
3. Incident Control		Phone	Cell Phone Ra	dio Ch
Incident Controller	lon Reade			Doc 5
Deputy IC	Steve Joyce	No.		Doe 5
Information Officer	THE REPUTE	BOOK		Doc 5
Safety Officer	Logan Akers		1	Nac 5
Liaison Officer	4 65	1469	V	Doc 5
			9,	
4. Agency Representativ	re	Phone	Cell Phone Ra	dio Ch
Lead Agency	FENZ			
Agency	MCDEM			
Agency	Enterprise Trust	(V., A)		
Agency	111.			
5. Planning/Intel Section	0.	Phone	Cell Phone	Radio Ch
Planning/Intel Manager	Rory Renwick	7/E P		Doc 5
Situations Unit	Rory Repuid			
Resources Unit	Pete Walker			Doc 5
Management Support Unit	Name of the last o	11811		Doc 5
Information Unit				
Technical Specialists Unit				
6. Logistics Section		Phone	Cell Phone	e Radio Ch
Logistics Manager	Pete Walker	2571/4		Doc 5
Supply Unit	Sue Stewart (NZ based)		EL JATE	
Catering Unit	The state of	N. C.		Doc 5
Supply Unit Catering Unit Facilities Unit Finance Unit	Market I			
Finance Unit	Sue Stewart			
Communications Unit	Peter Walker			
Medical Unit	Logan Akers			Doc 5

Makara Fire, Chatham Island. Shift period: 8th Feb 2018 0800-2000

Γ	7. Operations Section		Phone	Cell Phone	Radio Ch
	Operations Manager	Dale Iawa			Doc 5
- 1	Dep Ops / Dep Pian Manager	AVALUE OF THE PARTY OF THE PART			Doc 5
	Sector Alpha Supervisor	Dale Tawa			C
	Sector Zulu Supervisor	Dale Tawa			10
	Sector Sierra Supervisor	Dale Tawa		N.	
1	Air Attack Supervisor	Colin Robinson			Doc 5
	Air Support Supervisor			A. Y	
			.],	1/	
	8. Prepared by:		lan Reade		
		Official.	lan Reade		
	ased	Contraction of the second			







3. Radio Channels Assigned To	Function	Channel	Frequency	5
Command	Management	Doc 5		
Tactical	Tactics	Doc 15		5
Ground to Air	Air Ops	Fire 4	0	
Air to Air	Pilots	119.1	10	
				_
4. Telephone Assigned To	Landline	Cellphone X	Fax	Comn
		110		
		-0		
	-	•••		
6. Other (e.g. email, : Began unit available fo phone redundancy				
FENZ SAT Phone	100			
	(O)			
7. Prepared by:	Th.	eter Walker		



AIR OPERATIONS PLAN

3. Personnel and Comm	unications			_(
Position	Name	Affiliation	Phone	Radio Chan
Air Div. Commander	Colin Robson	FENZ - Wellington		Fire 4 DOC 5
Air Attack Supervisor				0
Air Support Supervisor				
Lead Helicopter Pilot		Southern Helicopters	·Ó	Fire 4 DOC 5
Lead Fixed-Wing Pilot			20	
A Ala Danasana Analasan			V	-

4. Air Resource Assignments

Pilot Name/ Company	Aircraf t Type	Reg or Callsign	Assignment	Tactical Freq/Chan	Telephone Numbers
- Southern Helicopters	Squirrel B3	IMR	Sectors A,Z, Redeployment of ground	Fire 4	
Garden City		HGU	crews for structure pad an interior on activation of charger points	Fire 4	

5. Location of Filling Points/Service Areas

Name Grid Reference

Chatham Airport

Various dipping points within fire ground

6. Safety Notes / Hazards Radio Coverage Limitations

Power lines run East West on Owenga Road. Small Cessna fixed wing operating from airport from Estand. Normal airport operations domestic from Tuuta airfield.

0600 thermal eight with

7. Air Operations Special Equip or Service

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

8. Prepared By: Colin Robson



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 behaviour.
- Recognise current weather conditions and obtain forecasts.
- Ensure instructions are given and understood.
- Obtain current information on
- Remain in Communication with Remain in Communication.

 crew members, your sugerps. and adjoining forces.
- Determine safety escape routes.
- Establish lookous in potentially hazardous truations.
- 9. Retain control at all times.
 10. Stay a bar, keep calm, think
 clearly, act decisively.

Watchouts (

- Fire not scouted and sizedate
- In country not seen in da light.
- Safety zones and escipe outes not identified. 3.

- Sarety zones and escipe toutes not identified.
 Unfamiliar with heat per and local factors influencing fire penviour.
 Uninformed onest ategy, tactics and hazards.
 Instructions and assignments not clear.
 No communications link with crew members or supervisor.
- Logs ructing fireline without safe anchor point.
- enstructing 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
- 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

Fatigue - Crew Boss to manitor Slips and Falls - Crew erlefings

Air Operations Cow briefings, pilots and Air Ops monitoring

Weather - Crew boss and pilats to monitor - Rapid changes, electrical storms (hypo, hyper)

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 – particularly Alpha and Sierra – air ops to monitor radio

PLB - RCCNZ notified of Chatham Islands activity

Peat Bog - ground crews briefed

Livestock / Bees - Ground crews briefed

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

5. Prepared By:

Logan Akers





SECTOR ASSIGNMENT

3. Sector	4. Description		5. Division Assigned
Aipha	Direct attack on the Western Flank		0-
6. Sector Supervisor	Affiliation	Phone	Radio ch
Dale Tawa	FENZ	2 10	»DOC 5

7. Resources Assigned this period

	o pomo a		Transport	Drop-off	Pickup
Resource/Crew	Leader	# Persons	Required	Point/time	Point/time
Wellington		+5	Van	0.880	1800
Hutt	MASS.	5		0800	1800

8. Sector Assignment / Special Instructions

- Hutt Crew working in southern part of sector under
- Wellington working in central part of sector under
- Continuation of perimeter containmen
- Establish drop points and GPS
- Develop and flag ground access
- Maintain reporting schedules
- Maintain reporting schedules
 Re-deployment to other sectors determined by fire behaviour
- Home safe

9. Sector Communications	Phone	Radio Ch
11/2		
Operations Manager		DOC5
Air Attack Supervisor Colin Robinson		Fire 4
Safet Officer Logan Akers		DOC5
10. Prepared By: Dale Tawa		





3. Sector	4. Description				5. Divi	sion Assigned
Zulu	Eastern Flank					V.
6. Sector Supervisor		Affiliation		Phone		Badio Ch
Dale Tawa		FENZ	TAX III		1	S 00C 5
7. Resources Assigned	d this period					
Banana (Cana	Leader	# Persons	Transport Required	Droj		Pickup Point/tim
Resource/Crew	Binney	3	2x2 Seater		Fattle	Pointy and
		+	100	-		
		1	100	4		
R Sector Assignment	/ Special Instruct	tions	6.00			
B. Sector Assignment Air atta			10			
Air atta	ick on small perin	n <mark>eter sm</mark> okers		as Sierra) in even	t of increase
Air atta Reactiv	ick on small pering re deployment to	n <mark>eter sm</mark> okers		as Sierra) in even	t of increase
Air atta Reactiv fire act	ick on small pering re deployment to ivity	neter smokers this sector (ta	sking the same			t of increase
Air attaReactivefire actAwatar	ack on small pering the deployment to ivity ou land owners of	neter smokers this sector (ta perating in so	sking the same thern part of Z	ulu secto	r	
 Air atta Reactive fire act Awataş DOC to 	ick on small pering the deployment to ivity ou land owners of GPS track access	neter smokers this sector (ta perating inves- a from existing	sking the same	ulu secto	r	
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 Air atta Reactive fire act Awatap DOC to feature DOC ide provide DOC to 	ick on small pering the deployment to ivity ou land owners of GPS track access 205 in grid squaentify suitable by a co-ordinates, route markell access.	neter smokers this sector (ta perating in es- i from existing re 2022 op Points with	thern part of Z fire break in wi	iulu secto estern se ind clear I	r ctor to h Heli pads aries and	if required a
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Air atta Reactive fire act Awatas DOC to feature DOC ide provide DOC to Sector Communication	ick on small pering the deployment to ivity ou land owners of GPS track access 205 in grid squaentify suitable by a co-ordinates a route mark all actions	neter smokers this sector (ta perating in es- i from existing re 2022 op Points with	thern part of Z fire break in wi	iulu secto estern se ind clear I	r ctor to h Heli pads aries and	igh point if required a I map. Radio Ch
Air atta Reactive fire act Awatas DOC to feature DOC id provide DOC to P. Sector Communication Operations Man	ick on small pering the deployment to ivity ou land owners of GPS track access to 205 in grid squaentify suitable by a co-ordinates or oute mark all actions	neter smokers this sector (ta perating in sec in from existing re 1932) op Points with	thern part of Z fire break in wi	iulu secto estern se ind clear I	r ctor to h Heli pads aries and	igh point if required a map. Radio Ch
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Air atta Reactive fire act Awatas DOC to feature DOC id provide DOC to P. Sector Communication Operations Man	ce deployment to ivity ou land owners of GPS track access 205 in grid squaentify suitable by a co-ordinates, a route mark alliage tions Colin Robin	neter smokers this sector (ta perating in sector (ta) perati	thern part of Z fire break in wi	iulu secto estern se ind clear I	r ctor to h Heli pads aries and	igh point if required a map. Radio Ch



	SE	CTOR ASS	SIGNMEN	VT.		1038
3. Sector	4. Description				5. Divi	isjon Assigned
Sierra	Northern Perim	n Perimeter of Fire				
5. Sector Supervisor		Affiliation		Phone	0	Radio Ch
Dale Tawa		FENZ)	DOC 5
7. Resources Assigned Resource/Crew	l this period	# Persons	Transport Required	Drop	-off time	Pickup Point/time
resource, wen	rewel	(r r urouns				
			7/10			
	a Military	notes Operation		Annual classes as as as a	1 resour	4
1300hr • Redepl	oyment to other	sectors determ	nined by fire b	pehaviour		
1300hr Redepl Homes Trigger	s oyment to exercise safe point activation	sectors determ	nined by fire b	ehaviour		
1300hr Redeple Home s Trigger plan	oyment to extern safe point activation the same same same same same same same sam	sectors determ	nined by fire b	ehaviour	edeterm	iined response
1300hr Redepl Home s Trigger plan Sector Communication Operations Mana	oyment to extern safe point activation the same same same same same same same sam	sectors determ	nined by fire b	ehaviour	edeterm	Radio Ch
1300hr Redepl Home s Trigger plan Operations Mana	oyment to other safe point activation tions	sectors determ	nined by fire b	ehaviour	edeterm	Radio Ch



SECTOR ASSIGNMENT

3. Sector 4. Description 5. Division Assigned **Predetermined Contingency Response Plan**

Dale Tawa **FENZ**

			The Person Labor.	-	
7. Resources Assigned	i this period				
Resource/Crew	Leader	# Persons	Transport Required	repoff	Pickup Point/time
Air Ops	Colin Robson	1 x Squirrel	_0		
		1 x B3		1	
Ground Crews	DB-15-E101	2 x 5-man crew	20,		
Waitangi Fire Brigade	Steve Joyce	2 x Appliances	10		

8. Sector Assignment / Special Instructions

Resources to redeploy as above in the event of fire

Breach of trigger point 1 requires withdraw round crews and redeployment towards structure protection

WAITANGI OWENGA ROAD EVACUA

Trigger Point 1.

Allowing 10L foam concentrate / property starting nearest breach and on the south side of the road, ignoring 2 Xuan elendable identified properties

1420 - behind 2 fire breaks - protect only if fire crosses first fire break.

1028 - defendable grass surround

behind sheds if owner is unable to harrow/mulch ground

- Do not commit crews - Foam dump from air

able grass surround

am Island Urban respond to Power Station

o to defend Generators

nd crews redirected to Kopinga with Fulton Hogan

9. Sector Communications		Phone	Radio Ch
Operations Manager			DOC5
Air Attack Supervisor	Colin Robinson		Fire 4
Safety Officer	Logan Akers		DOC5
10. Prepared By:	Dale Tawa		





SECTOR ASSIGNMENT

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

.ogan Akers

/. Nesources Assigned	Transport	Drop-off	Pickup		
Resource/Crew	Leader	# Persons	Required	• Phin Time	Point/time
Air Ops	Colin Robson	1 x Squirrel			
		1 x 83	1	P	
Ground Crews	1000	2 x 5-man crew	100		
Waitangi Fire Brigade	Steve Joyce	2 x Appliances	(0)		

8. Sector Assignment / Special Instructions

Injury Accident Contingency

- Provide First Aid
- Pass Priority message requ
- responsibility for the "New" incident Senior person "ON SCEI
- econdary incident. **Advice Incident Control**
- erson "OFF SCENE" assumes responsibility for the "Existing" Most appropriate S incident
- Formal K45 returning sector or resumption of nermal operations. ning sector command at conclusion of "New incident and

- Aircraft Incident Continuericy

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

 If vecessary, Pass Priority Massage before landing to render immediate assistance or erting to pick up nearest Fire Crew resources and returning to scene.

Advice Incident Controller of aircraft incident.

Sector Communications	,	Phone	Radio Ch
Operations Manager			DOC5
Air Attack Supervisor	Colin Robinson		Fire 4
Safety Officer	Logan Akers		DOC5
10. Prepared By:	Logan AKers		



MEDICAL PLAN

3. First Aid Station	_	Phone/Radio	Paramedics
Name Point 106	Location Staging	Channel DOC 5	available at Station First Aiders
Crew Leaders	Alpha Sector	DOC 5	First Aiders
Clew request	Alpha Sector	0000	Troc Aiders
4. Transportation	Addre	ss Phone/Rad	fio Paramedics
Ambulance Service	TW:	Channel	available with Ambulan
Air Operations			
Emergency Evac only)			
St John Ambulance	1 Hospital Road	ERIOLE C	Yes
WestPac Rescue			Yes
Life Flight		1	
		< 0	avel Time Burn
HOSDAAI NAME	Address (Mone Road	Air Unit Pad
	spital Road	20 min	10 No No min
-	spital Road	20	10 No No
Chathams Medical Centre 6. Special Emergency Promotes and Centre utilised to see the control of the control o	spital Road ocedures thollise patients	20	10 No No
Chathams Medical 1 Ho. Centre	pcedures tubilitie patients Wellington or Aircraft Movements	20	10 No No





Chatham Island. b 2018 0800-2000			Scrub EROS m/hr	Negligible	650	268	1060	487	1650
Makara Grey Chatham Island. Shift period (2) Feb 2018 0800-2000			Grass EROS 75%cured m/hr Sc	Negligible	160	Negligible	168	100	511
	REDICTION		151	1.6	4.5	1.6	4.5	2.4	6.9
	R PRED	e 6 250	S. FEMC	70	82.5	78	150	80	98
	AVIOU		Wind Dir	Ś	PSE	LLJ	NE	NE	NE
	AND FIRE BEHAVIOUR PREDIC		Wind Km/hr	+	15, 5,	70	15	15	20
	AND F		Æ		09		09	1,	09
	WEATHER /		Temp Camp		21		22		23
EY E	8			8/02/2018 4:00	8/02/2018 16:00	9/02/2018 4:00	9/02/2018 16:00	10/02/2018 4:00	10/02/2018 16:00
FIRE EMERGENCY				Thursday Morning	Thursday afternoon	Friday Morning	Friday afternoon	Saturday Morning	Saturday afternoon

Prepared By: Rory Renwick

Congo of the second of the sec



Updated forecast - 7 February 4:00 pm NZDT

Rest of Wednesday (through to midnight):

- Winds SW 10-25 km/h easing to 10-25 km/h with gusts to 35 km/h.
- Temperature falling to near 14°C by midnight
- Relative humidity increasing to 85-90% by midnight.
- Slight chance of a shower, otherwise dry. Rainfall, if any, less than 2 mm.

Thursday (midnight to midnight):

- 37 ACT 1982 Wind backing with time from SW before sunrise, to S by midday, then SE by 3 pm, to ENE by 6 pm. Sustained winds 20 km/h or less, with gusts to 35 km/k, with gusts to 25 km/h
- Early morning minimum temperature 12-13 degrees, increasing to 21-22 degrees in the afternoon.
- Early morning maximum humidity near 90%, falling to 10% in the afternoon, then increasing to 90-95% by midnight.
- Slight chance of a shower, otherwise dry. Rainfall, if any, less than 2 mm.

Friday (midnight to midnight):

- E to NE before sunrise, becoming Ne to NNE after sunrise at 10-25 km/h, gusts up to 35 km/h, highest gusts in the after neon
- Early morning minimum temperature 13-14 degrees, increasing to 21-22 degrees in the
- Early morning maximum flumidity near 95%, falling to 65% in the afternoon, then increasing to near 90% by midbight.
- Dry to mainly droweather expected.

Outlook for Satur

- Minimum relative humidity to 65-70.

 Dry to mainly dry weather expected. ds N to NE, sustained 15-30 km/h.
 - num temperatures 22-23 degrees.

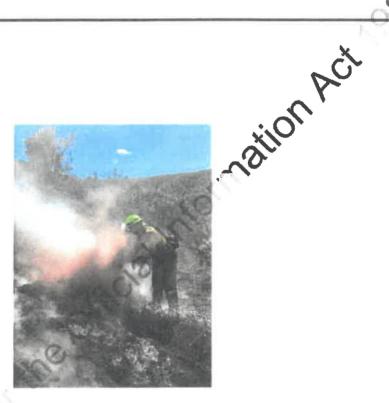
finimum relative humidity to 65-70%.



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# **Incident Action Plan**



1. Approved by Incident Controller:
Name

Reade Date/Time Signed





# SITUATION REPORT

3. Location

4. Vegetation

5. NZTM Grid Ref.

South Western end Chatham Island

Taneora Scrub / peat /

# 6. Assessment

Vegetation in Tarahinau 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 one structure and burning up to another, both near the southern coastal end of the fireground. No further fire spread was experienced during Saturday Sunday. On Monday 4th and Wednesday the 5th there were a few flare ups near the perimeter but crews and helicopters 5th there were a few flare ups near the perimeter but crews and helicopters me these. Thermal flights on Wednesday- Thursday saw numerous small helicopters re able to contain perimeter on Sierra and some larger hot areas in other sectors.

## 7. Action taken

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

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

and northern Edge of Alpha. Main focus of ground crews has been

Two medium helicopters carrying out bloom ork and crew transport on the 4th Feb - reducing the number of visible smokers around to meter, focussing on the currently inaccessible areas along the cliff face in Zulu.

mopping up around structures at the southern end of Zulu, and A local crew has done consid and communications so they can call for assistance in the have been provided with so event of and incident

Partial National Incident Management Team from NZ arrived midday on the 3rd Feb to assist with incident management.

# 8. Factors

Access around fireground 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.

