Exercise # 1

Exercise Burning Ember - United Kingdom

Level of difficulty:	High
Module:	IGNIS
Version:	1.0
Type:	Wildfire/Forest Fire

Approvals:

Name	Title	Entity
		ENB
		ECASC
		NFRS
		VdF

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Needs assessment

- Different concepts of ICS;
- 2. Different tactics and procedures;
- 3. Different firefighting terminology;
- 4. Difficulties on language/language barriers;
- 5. Different communications systems and procedures;
- 6. Difficulties on the logistic support of the operation;
- 7. Lack of interoperability between resources;
- 8. Lack of specific procedures for the receiving of aerial means (including logistical support);
- 9. Different coordination procedures of aerial means (ground-air- ground);
- 10. Difficulty in ensuring cross national training and exercising in Forest Fires;
- 11. Lack of a knowledge centre about Forest Fires operations;
- 12. Increased difficulties on command and control of the overall operation;
- 13. Difficulties in gathering quality information in a complex operation;
- 14. Increased needs on the operation planning and additional knowledge about fire behaviour;
- 15. Increased risks on firefighting safety and the probability of accidents;
- 16. Increased challenge and difficulties on the logistic support of the operation;
- 17. Different entities with different operational procedures and concepts on Forest Firefighting.













Scope

Personnel to be involved:

Fire command personnel

External agencies

Agencies involved:

Fire and Rescue Personnel (NFRS, Tyne and Wear, Scottish Fire Service)

Police

Ambulance

Forestry Commission

Newcastle Airport

UK Borders Agency (Immigration)

Civil Aviation Authority/Air Traffic Control

Northumbrian Water

Environment Agency

Ministry of Defence

Natural England

Northumberland National Park Authority

Mountain rescue

Northumberland County Council

French Civil protection

Hydroelectric power owner

National Coordination Advisory Framework (NCAF)

Cabinet Office

Positions and Resources:

Day 1		Day 2		Day 3	
XVR	Role play	XVR	Role Play	XVR	Role Play
IC Sector	(Tactical Commander/ Ops Commander)	IC Sector Commander	(Tactical Commander/ Ops Commander)	IC Sector Commander	(TAC Commander/ Ops Commander)
Commander 1 Sector	Command Support x 2	Sector Commander	Environment Agency	Sector Commander	Command Support x 2
Commander 2 Police Helicopter	Forestry	Sector Commander	Northumbrian Water	Sector Commander	Forestry Civil Contingencies
Tactical	Civil Contingencies	Police Helicopter	HVP Tac Ad	Police helicopter	Media
Lookout	Media	Tactical lookout 1	MOD Ambulance	Aerial Support Sector Coordinator	Environmental Agency
		Tactical lookout 2	Police	Canadair Pilot x 1	HVP Tac Ad
			Media	Tactical Lookout 1	Ministry of Defence Ambulance
				Tactical Lookout 2	Police













		Northumbrian Water

Type of Incident/Emergency: Wildfire in Rural Urban Interface (RUI) with extreme fire behaviour.

Geographic Area/Location/Coordinates: A large Forest in rural Northumberland. The forest is predominantly composed of Sitka Spruce plantation, but also includes some small stands of Norway Spruce and Larch. The forest is surrounded by open moorland and there are some areas of open habitat/moorland within the forest.

Coordinates-

Date and Type of Exercise: 23rd August 2016. Virtual Reality with Roleplay.

Setup

	Day 1	Day 2	Day 3
Position 1	IGNIS (controller)	IGNIS (controller)	IGNIS (controller)
Position 2	XVR (controller)	XVR (controller)	XVR (controller)
Position 3	Incident Command	Incident Command	Incident Commander
Position 4	Sector Commander 1	Sector Commander 1	Sector Commander 1
Position 5	Sector Commander 2	Sector Commander 2	Sector Commander 2
Position 6	Tactical Lookout	Sector Commander 3	Sector Commander 3
Position 7	Police Helicopter	Police Helicopter	Sector Commander 4
Position 8		Tactical Lookout 1	Police Helicopter
Position 9		Tactical Lookout 2	Aerial Support Sector Coordinator
Position 10			Canadair Lead Pilot
Position 11			Tactical Lookout 1
Position 12			Tactical Lookout 2













Exercise objectives

Obj #1	Employ behaviours that permit the collection of relevant incident information.
Obj #2	Gather sufficient information regarding the incident type, size, complexity and resources.
Obj #3	Gather and interpret the information to develop an understanding of the current and developing incident.
Obj #4	Utilise an appropriate decision strategy for the situation.
Obj #5	Implement a plan that includes objectives, strategies and tactics.
Obj #6	Employ satisfactory communication behaviours throughout the incident.
Obj #7	Implement decisions utilising coordination & control behaviours.
Obj #8	Review the incident situation and modify the incident decisions and plan.













EXERCISE NARRATIVE

General Situation

The date is 23rd August 2016 and there has been a period of 3 weeks of drought in Northumberland. There are a number of wildfires ongoing around the UK as similar conditions have been experienced across the whole country. There are a significant number of wildfires in northern and central Scotland.

A fire started in Falcon Forest at 10:00hrs. The fire was caused by a campfire that had not been fully extinguished. A member of the public walking their dog in the area called 999 to report the fire and Fire Control immediately mobilized a Pre-Determined Attendance (PDA) of 4 X fire appliances and 1x Incident Support Unit (ISU). The first crews were delayed arriving at the scene due to difficulties in identifying the precise location caused by poor information from the member of the public, difficult access and limited visibility in the forest area. Three fire appliances shortly followed the arrival of the first appliance. The ISU arrived at 12:00hrs.

At 11.40hrs the Incident Commander of the first fire appliance contacts Fire Control to make pumps 10 and request the attendance of a Tactical Commander.

The Tactical Commander arrives at the ISU at approximately 12.15hrs, where he/she receives a briefing and handover. The Tactical Commander then takes charge of the incident.

Resources deployed

- 1 Tactical Commander
- 18 fire appliances with 70 firefighters
- 2 x High Volume Pumps
- 1 x Incident Support Unit
- 1 x Police Helicopter
- 6 x Forestry Commission personnel (including 1 x Forestry Commission Duty Officer)
- 2 x Civil Contingencies Officers

Weather Forecast

The last 3 weeks have been characterized by very low humidity levels of 40 per cent, strong to high winds of 30 km per hour, north easterly, and medium to high temperatures of 20 to 28 degrees Celsius. According to the UK Met Office, these conditions are expected to continue for the next 5 days resulting in a Fire Severity Index of 5. The Fire Severity Index risk in most parts of the UK currently ranges from 4 to 5.

Critical Aspects

Extreme weather conditions and very high risk of fire and fire spread. This potentially puts populations at risk and threatens the resilience of the Fire and Rescue Service.

Assistance Requested

- Day 1 Incident Commander makes pumps ten and requests Flexi Duty Officer (Tactical Commander).
- Day 2 Request for National Resilience Assets (more High Volume Pumps): Aerial Resources from UK and then EU Civil Protection Mechanism
- Day 3 Request for National Resilience Assets (more High Volume Pumps)













Operational Details

Estimated period of intervention: 4 days

Point of entry for aerial assistance: Newcastle International Airport (commercial airport).

Upon arrival of aerial resources and accompanying crew, a liaison team will receive the assistance and will perform a welcome briefing to relay the most relevant information, including: scooping points, national operational coordination procedures, safety and security aspects, etc. UK will continue providing all the support (lodging, food and local transportation for pilots and other team members as well as fuel for the airplanes).

Direct point of contact (POC) for the present operation:

• Cabinet Office, UK Government















Events list

Time	Ev#	Туре	Event Description
T+3:00	M1	↓	Arrival of the Strategic Commander at the Incident Support Unit.
T+3:30	M2	1	Increase in fire intensity reported by fire crews on the right and left
			flanks
T+4:00	M3	↓ ↓	Arrival of requested resources
T+6:00	M4	1	Wind strength increase and extreme fire behaviour observed
			[spotting]
T+7:00	M5	↓	Decrease in fire intensity and rate of spread accompanied with
			decreasing visibility.
T+21:00	M6	1	Increase in wind speed and change of direction towards Ministry of
			Defence Radar Station and further forestry.
T+22:00	M7	↓	Arrival and deployment of additional crews
T+23:00	M8	1	Arrival of the Deputy Chief Fire Officer
T+23.30	M9	1	Increase in rate of fire spread and observation of extreme fire
			behaviour [spotting]
T+28.45	M10	1	Arrival of aerial support sector coordinator at Incident Support Unit
T+32:00	M11	↓	Arrival of aerial resources at Newcastle Airport. Liaison with UK Border
			Force. Refuel and request briefing for Day 3.
T+34:00	M12	1	HVP failure in village area-returning to home station
T+34:30	M13	1	Aerial support sector coordinator informs Incident Command Support
			that aerial resources cannot fly until following morning due to fading
			light.
T+35	M14	1	Fire increasing in intensity towards village
T+38	M15	↓	Fire conditions and rate of spread decrease. Visibility is also decreasing
			(night-time)
T+45	M16	1	Change of weather conditions, fire heading towards Radar Station and
			forest
T+46	M17	↓	Aerial resources on route and available to commence aerial attack in
		_	30 minutes
T+46.30	M18	↓	Arrival of aerial resources and commencement of aerial attack
T+47	M19	1	Arrival of the media at the Incident Support Unit
T+49	M20		Lead pilot requests update on effectiveness of tactical plan
T+50	M21	1	Refuelling of aircraft. Return to scene of operations expected in 2
			hours.
T+52	M22	↓	Aerial support returns to the scene of operations and is ready to
			recommence aerial attack
T+53	M23	<u>↑</u>	Arrival of Air Chief Marshal
T+54	M24	<u> </u>	Fire is approaching Radar Station
T+54:45	M25	↓	Tail fire is extinguished and flank fires are reducing in intensity and
			rate of spread
T+56:00	M26	↓	Head fire is suppressed













T+56:30	7	T+56:30	End of exercise
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^{↑ -} Upgrading event ↓ - Downgrading event M – Major event m – Minor event

Expected actions list

Time	Ea #	Action Description	Referral Objective #
T+0	0	Drive to incident and correctly find ISU	1
T+0:05	1	Contact the existing Incident Commander to request face-to-face handover concerning FRS resources and additional information from other partners.	1, 2, 3 and 6
T+3:30	2	Request for additional resources	4 and 5
T+4:00	3	Organisation and briefing of existing and arriving resources	4, 5, 6 and 7
T+6:00	4	Request for situation report from all sectors and request for further resources	1, 2, 3, 6 and 8
T+7:00	5	Development and implementation of night-time operations plan	4, 5, 6 and 7
T+21:00	6	Request further resources and liaise with MOD and Forestry Commision	1, 2, 3, and 6
T+22:00	7	Organisation and briefing of arriving resources	4, 5, 6 and 7
T+23:00	8	Face to face handover arranged. Deputy Chief re-assigned to Gold Command.	6 and 8
T+23:30	9	Request aerial resources due to problems with access and egress of personnel and ground resources. Creation of aerial support sector and appointment of Aerial Support Sector Coordinator.	4, 6 and 8
T+28:45	10	Face-to-face briefing of Aerial Support Sector Coordinator	6 and 8
T+32:00	11	Organisation and briefing of aerial resources	4, 5, 6 and 7
T+34:00	12	Redeployment of resources	4, 5 and 6
T+34:15	13	Briefing of ground crews that aerial support will not be available until the morning and ground operations can continue.	4, 5, 6 and 7
T+35:00	14	Organisation of evacuation of the village, including request for deployment of Civil Contingencies Team.	3, 4, 5, 6 and 7
T+38:00	15	Implementation of night-time operations	4, 5, 6 and 7
T+45:00	16	Request for aerial resources	6
T+45:30	17	Briefing of all sectors and tactical lookouts of aerial attack plan	4, 5, 6 and 7
T+46:00	18	Execution of tactical and assessment and reporting	4, 5, 6, 7 and 8













		of fire conditions	
T+47:00	19	Formulation of a JESIP briefing and delivery to the media	1 and 6
T+49:00	20	Briefing provided to Aerial Support Sector Coordinator	4, 5, 6 and 7
T+50:00	21	Deployment of additional ground resources for ground attack	4, 5, 6, 7 and 8
T+52:00	22	Briefing and deployment of ground resources. Briefing of aerial resources and deployment of aerial attack.	4, 5, 6 and 7
T+53:00	23	Face-to-face briefing between Incident Commander and Air Chief Marshal	1 and 6
T+54:00	24	Change of tactical plan to redirect water bombing and/or ground attack to protect Radar Station. Organisation of evacuation of the Radar Station.	4, 5, 6, 7 and 8
T+54:45	25	Brief ground crews to continue to work along the flanks to pinch and reduce the size of the head fire. Brief aerial resources to attack the head fire.	4, 5, 6, 7 and 8
T+56:00	26	Change of tactical plan to mopping up and closing down incident. Radio message to Radar Station that it is safe for staff to return.	4, 5, 6, 7 and 8
T+56:30	27	End of exercise	

Master event and expected actions list

NB this landscape table is created in a separate accompanying document.













Events and expected actions list detail

Event #M1					
H + 0:03	Major event – Arrival of the Strate	gic Co	ommander at the Incide	ent Support Unit (ISU).	
H+	Expected action – Contact the existing Incident Commander to request face-to-face handover concerning FRS resources and additional information from other partners.				
	Executed Not Executed				
H+	Minor event - Operator assumes avatar and drives up to student location.	→	Major event - Radio message #1 from Fire Control requesting situation report and location.		
H + to H +			Expected action - Co Incident Commande face-to-face handow	er to request	
			Executed	Not Executed	
	Next event		+	Instructor intervention	

Event #M2					
H + 3:30	Major event – Increase in fire in	tensit	ty on the right and le	ft flanks	
H + # to H	Expected action – Request for ac	dditio	nal resources.		
+#					
	Executed Not Executed				
H+#	Minor event - Mobilisation of requested resources with an ETA of 30 minutes.	1	Major event - Radio message #2 that one of the flanks is spreading towards a village.		
H + # to H			Expected action - R		um
+#			of at least 3 fire app	oliances.	
			Executed	Not Executed	k
	Next event		+	Instructor intervention	1













Event #M3					
H + 4:00	Major event – Arrival of request	ed re	sources		
H + # to H	Expected action – Organisation	and k	riefing of existing an	<mark>d arriving resourc</mark>	es.
+#					
	Executed		Not Ex	ecuted	
H + #	Minor event - Further radio messages from all sectors indicating fire situation.	1	Major event - Radio from Tactical Looko approaching a Quar	out that fire is	1
H + # to H + #			Expected action - O briefing of existing or resources.		
			Executed	Not Executed	1
	Next event		←	Instructor intervention	

Event #M4				
H + 6:00	Major event – Wind strength increase and extreme fire behaviour observed (spotting)			
H + # to H + #	Expected action – Request for sit further resources.	tuatio	on report from all sec	tors and request for
	Executed Not Executed			ecuted
H+#	Minor event - Further radio messages from all sectors and tactical lookouts indicating fire situation. Resources are mobilised with ETA of 30 minutes.	ļ	Major event - Radio message #4 from Sector Commander 2 informing of tactical withdraw.	
H + # to H + #			Expected action - Request for situation report from all sectors.	
			Executed	Not Executed
	Next event			Instructor intervention













Event #M5					
H + 7:00	Major event – Decrease in fire in decreasing visibility.	Major event – Decrease in fire intensity and rate of spread accompanied with decreasing visibility.			
H + # to H + #	Expected action – Development and implementation of night-time operations plan.				
	Executed		Not Ex	ecuted	
H+#	Minor event - Implementation of night-time operations.	↓	Major event - Radio message #5 from Sector Commander 1 informing of poor visibility on the fireground.		
H + # to H + #			Expected action - Request for situation report from all sectors.		
			Executed	Not Executed	
	Next event		+	Instructor intervention	

DAY 2

Event #M6					
H + 21:00	Major event – Increase in wind speed and change of direction towards Ministry of Defence Radar Station and further forestry.				
H + # to H + #	Expected action – Request further Commission.	er res	ources and liaise witi	h MOD and Fores	try
	Executed		Not Ex	ecuted	
H + #	Minor event - Mobilisation of additional resources and ETA of 1 hour. MOD liaison officer arrives at Incident Support Unit (and applies pressure over national security). Duty Officer from Forestry Commission arrives at Incident Support Unit.	ţ	Major event - Radio message #6 from tactical lookouts informing of further fire escalation and MOD liaison officer arrives at Incident Support Unit requesting situation report.		↑
H + # to H + #			Expected action - Re resources and liaise Forestry Commission	with MOD and	
	Next event		Executed ←	Not Executed Instructor intervention	













Event #M7					
H + 22:00	Major event – Arrival and deployment of additional crews				
H + # to H + #	Expected action – Organisation of	and b	riefing of arriving res	sources.	
	Executed		Not Ex	ecuted	
H + #	Minor event - Further radio messages from all sectors indicating fire situation.	→	Major event - Radio from Tactical Looko approaching village Radio message fron Tactical Lookout that continues to advance Radar Station.	out that fire is number two. In another at fire	
H + # to H + #			Expected action - Organisation and briefing of arriving resources.		
			Executed	Not Executed	
	Next event		←	Instructor intervention	

Event #M8				
H + 23:00	Major event – Arrival of the Dep	uty C	Chief Fire Officer	
H + # to H + #	Expected action – Face-to-face had been commander and Deputy Chief Fi		•	en Incident
	Executed		Not Ex	ecuted
H + #	Minor event - Deputy Chief Fire Officer is re-assigned to Gold Command and leaves.	↓	Major event - Radio from tactical lookou further escalation of is advancing closer Radar Station. Also pressure from MOD Commission Liaison	ut that there is of the fire and it towards the applied and Forestry
H + # to H			Expected action - Request for situation	
+#			report from all sect	ors.
			Executed	Not Executed
	Next event		←	Instructor intervention













Event #M9					
H + 23:30	Major event – Increase in rate or behaviour (spotting).	Major event – Increase in rate of fire spread and observation of extreme fire behaviour (spotting).			
H + # to H + #	Expected action – Request aerial resources due to problems with access and egress of personnel and ground resources. Creation of aerial support sector and appointment of aerial support coordinator.				
	Executed		Not Executed		
H + #	Minor event - Mobilisation of aerial attack (1 aerial coordination plane and 2x Canadair) from France with ETA of 6 hours.	1	Major event - Radio message #9 from tactical lookout informing of further fire escalation and fire advancing closer towards Radar Station. Pressure applied by MOD and Forestry Commission liaison.	1	
H + # to H + #			Expected action - Request aerial resources due to problems with access and egress of personnel and ground resources. Creation of aerial support sector and appointment of aerial support coordinator.		

Event #M10					
H + 28:45	Major event – Arrival of aerial support sector coordinator at Incident Support Unit				
H + # to H + #	Expected action – Face-to-face k	Expected action — Face-to-face briefing of aerial support coordinator.			
	Executed		Not Ex	ecuted	
H + #	Minor event - Deployment of aerial support coordinator.	1	Major event - Radio from aerial support requesting briefing.	coordinator	
H + # to H			Expected action - Face-to-face briefing		
+#			of aerial support co	ordinator.	
			Executed	Not Executed	
	Next event		←	Instructor intervention	













Event #M11					
H + 32:00	Major event – Arrival of aerial resources at Newcastle Airport. Liaison with Border force. Refuel and request briefing for day 3.				
H + # to H + #	Expected action – Organisation and briefing of aerial resources.				
	Executed		Not Ex	ecuted	
H+#	Minor event - Radio message from aerial support sector coordinator to confirm he/she will relay briefing to pilots.	ļ	Major event - Radio from Aerial Support Coordinator reques plan for aerial attac	t Sector ting a tactical	1
H + # to H + #			Expected action - Organisation and briefing of aerial resources.		
			Executed	Not Executed	
	Next event		←	Instructor intervention	

Event #M12					
H + 34:00	Major event – HVP failure returr	ning t	o home station in vill	age area	
H + # to H + #	Expected action – Redeployment	t of re	esources		
	Executed		Not Ex	ecuted	
H + #	Minor event - Redeployment of HVP resources	↓	Major event - Radio message #12 from Sector Commander 3 informing of an increase in fire intensity and request for more resources.		1
H + # to H		-	Expected action - Redeployment of		
+#			resources		
			Executed	Not Executed	1
	Next event		1	Instructor intervention	













Event #M13	Event #M13				
H + 34:15	Major event – Aerial support sector coordinator informs Incident Command Support that aerial resources cannot fly until following morning due to fading light.				
H+	Expected action – Briefing of gro available until the morning and		• •		
	Executed		Not Ex	ecuted	
H+	Minor event - Radio messages from sector commanders confirming they will continue with ground attack.	ļ	Major event - Radio from Sector Commo requesting update of support and if he/si change tactics.	ander 1 on aerial	1
H + to H +			Expected action - Briefing of ground crews that aerial support will not be available until the morning and ground operations can continue.		nd
			Executed	Not Executed	
	Next event		+	Instructor intervention	

Event #M14						
H + 35:00	Major event – Fire increasing in	Major event – Fire increasing in intensity towards village [state sector]				
H + # to H + #	Expected action – Organisation of for deployment of Civil Contingen	-	, ,	e, including reque	st	
	Executed		Not Ex	ecuted		
H + #	Minor event - Village is evacuated and protected	+	Major event - Radio from Sector Comma informing of suspect and potentially fata village.	ander 3 cted injuries	1	
H + # to H + #			Expected action - Organisation of evacuation of the village, including request for deployment of Civil Contingencies Team			
			Executed	Not Executed		
	Next event		←	Instructor intervention		













Event #M15					
H + 38:00	Major event – Fire conditions decrease and rate of spread accompanied by decreasing visibility				
H +	Expected action – Implementation	on of	^f night-time operation	15	
	Executed		Not Executed		
H+	Minor event - Implementation of night time ops	1	Major event - Radio message #15 from tactical lookout informing reduced visibility		
H + to H +			Expected action - In night-time operation		
			Executed	Not Executed	
	Next event		Ţ	Instructor intervention	

Day 3

Event #M16					
H + 45:00	Major event – Change in weather conditions with fire now heading towards Radar station and forest				
H + # to H + #	Expected action – Request for aerial resources				
	Executed		Not Executed		
H + #	Minor event - Aerial support sector coordinator mobilises aerial resources	ļ	Major event - Radio message #16 from Sector Commander 1 requesting aerial support		
H + # to H + #			Expected action - Request for aerial resources		
			Executed	Not Executed	
	Next event		1	Instructor intervention	













Event #M17					
H + 45:30	Major event – Aerial resources on route and available to commence aerial attack in 30 minutes				
H + # to H + #	Expected action – Briefing all sectors and tactical lookouts of aerial attack				
	Executed Not Executed				
H + #	Minor event - Message passed to sector commanders of ETA of aerial support	ļ	Major event - Radio from Sector Comma requesting ETA of a and confirmation of for combined aerial attack	ander 1 erial support f tactical plan	Î
H + # to H + #			Expected action - Briefing all sectors and tactical lookouts of aerial attack		
			Executed	Not Executed	t
	Next event		+	Instructor intervention	

Event #M18				
H + 46:00	Major event – Arrival of Aerial resources			
H + # to H + #	Expected action – Execution of to fire conditions	actico	al plan and assessme	nt and reporting of
	Executed		Not Ex	ecuted
H + #	Minor event - Aircraft conduct water bombing and aerial support sector coordinator provides updates on progress and weather conditions	↓	Major event - Radio from tactical lookou bombing has taken ground crew. Subsemessage #19 from scommander that 5 have sustained injuneed to be withdrawattention.	of that water place over a equent radio sector firefighters ries and will
H + # to H + #			Expected action - Execution of tactical plan and assessment and reporting of	
	fire conditions			
			Executed	Not Executed
	Next event		←	Instructor intervention













Event #M19				
H + 47:00	Major event – Arrival of Media			
H+	Expected action – JESIP briefing formulated and delivered to media			
	Executed Not Executed			ecuted
H +	Minor event - Media leave		Major event - Medi	a persistently
		↓	ask Incident Comma	and Support
			Officer for further in	nformation
H + to H +			Expected action - JESIP briefing	
	formulated and delivered to media			ivered to media
			Executed	Not Executed
	Next event		↓	Instructor intervention

Event #M20				
H + 49:00	Major event – Lead pilot requests update on effectiveness of tactical plan			
H + # to H + #	Expected action – Briefing provide	ded to	o aerial support secto	or coordinator
	Executed		Not Ex	ecuted
H + #	Minor event - Aerial support sector coordinator is updated, pilots are briefed and aerial operations continue	ţ	Major event - Radio message #20 from aerial support sector coordinator that pilots require an update on effectiveness of aerial attack before continuing aerial attack	
H + to H +			Expected action - Ba aerial support sector	, ,,
			Executed	Not Executed
	Next event		↓	Instructor intervention













Event #M21				
H + 50:00	Major event – Refuelling of aircraft. Return to scene of operations expected in 2 hours.			
H + # to H + #				
	Executed Not Executed			ecuted
H + #	Minor event - Rate of fire spread remains stable	1	Major event - Rate increases	of fire spread
H + to H +			Expected action - Deployment of additional ground resources for ground attack	
			Executed	Not Executed
	Next event		1	Instructor intervention

Event #M22					
H + 52:00	Major event – Aerial support returns to the scene of operations and is ready to recommence aerial attack				
H + # to H + #	Expected action – Briefing and reand deployment of aerial resource		oyment of ground res	sources. Briefing	
	Executed		Not Ex	ecuted	
H + #	Minor event - Rate of fire spread increases	→	Major event - Rate of increases. If ground not briefed and red message from a tac will inform of a grouvicinity of water bor operations.	resources are eployed. Radio tical lookout and crew in the	1
H + to H +			Expected action - Briefing and redeployment of ground resources. Briefing and deployment of aerial resources		
			Executed	Not Executed	1
	Next event		+	Instructor intervention	













Event #M23				
H + 53:00	Major event – Arrival of Air Chie	f Mai	rshal for briefing	
H + # to H + #	Expected action – Face-to-face & Chief Marshal	riefir	ng between Incident (Commander and Air
	Executed		Not Ex	ecuted
H + #	Minor event - Air chief Marshal leaves the Incident Support Unit after requesting regular updates	←	Major event - Air Chief Marshal demands face-to-face briefing.	
H + to H +	· .		Expected action - For between Incident Co Chief Marshal	, , ,
			Executed	Not Executed
	Next event		←	Instructor intervention

Event #M24				
H + 54:00	Major event – Fire is approachin	g Rac	dar Station	
H +	Expected action – Change of tac ground resources to protect Rad Radar Station			
	Executed		Not Ex	ecuted
H+	Minor event - Fire approaching Radar Station is extinguished. Radio message from Radar Station that all staff are safe and accounted for.	↓	Major event - Radio from Radar station proximity of the fire assistance or evacu	stating close e, request
H + to H +			Expected action - Cl plan to redirect wat ground resources to Station. Organisation the Radar Station	er bombing and/or protect Radar
	Next event		Executed ←	Not Executed Instructor intervention













Event #M25	Event #M25			
H + 54:00	Major event – Tail fire is extinguished and flank fires are reducing in intensity and rate of spread			
H +	Expected action – Brief ground of pinch and reduce the size of the head fire.			
	Executed		Not Ex	ecuted
H+	Minor event - Fire approaching Radar Station is extinguished. Radio message from Radar Station that all staff are safe and accounted for.	ţ	Major event - Radio from Sector Comma requesting new tack message #23 from A Sector Coordinator permission to stand resources	ander 1 tics and radio Aerial Support requesting
H + to H +			Expected action - Bi continue to work all pinch and reduce th fire. Brief aerial reso head fire.	e size of the head
			Executed	Not Executed
	Next event		+	Instructor intervention

Event #M26				
H + 56:00	Major event – Head fire is suppr	essec	d	
H+	Expected action — Change of tactical plan to mopping up and closing down incident. Radio message to Radar Station that it is safe to return.			
	Executed		Not Ex	ecuted
H+	Minor event - Flank and tail fires extinguished. Radio message from Radar Station that staff have returned to the Radio Station and are now resuming their duties.	1	Major event - Radio message #24 from Police Helicopter identifying hotspots within the extinguished fire perimeter of Sectors 1 and 3.	
H + to H +	Ü		Expected action - Change of tactical plan to mopping up and closing down incident. Radio message to Radar Station that it is safe to return.	
	Next event		Executed	Not Executed













		4	Instructor
		-	intervention

Event #M27				
H +	Major event – End of exercise			
H+	Expected action – End of exercise			
	Executed		Not Executed	
H +	Minor event - N/A		1	
H + to H +			Expected action - End of exercise	

Messages [when expected action has not been executed]

Message #1	
Source of the message	Fire Control
Method of Transmission	Radio
Content of Message	Please provide a situation report. Have you assumed command of the incident?
Recipient/Referral	Incident Commander

Message #2	
Source of the message	Sector Commander 2
Method of	Radio
Transmission	
Content of Message	The left flank is spreading towards the Quarry
Recipient/Referral	Incident Commander

Message #3		
Source of the message	Tactical Lookout	
Method of	Radio	
Transmission		
Content of Message	Fire is approaching the Quarry	
Recipient/Referral	Incident Commander	













Message #4	
Source of the message	Sector Commander 2
Method of	Radio
Transmission	
Content of Message	Crews are tactically withdrawing from Sector 2 due to spot fires
Recipient/Referral	Incident Commander

Message #5		
Source of the message	Sector Commander 1	
Method of	Radio	
Transmission		
Content of Message	There is poor visibility on the fire ground due to fading light.	
Recipient/Referral	Incident Commander	

Day 2

Message #6	
Source of the message	Tactical Lookout
Method of	Radio
Transmission	
Content of Message	Increase in wind speed and change of direction of fire spread
	towards Ministry of defence Radar station and further forestry
Recipient/Referral	Incident Commander

Message #7	
Source of the message	Tactical Lookout
Method of Transmission	Radio
Content of Message	Fire is approaching a second village and continues to advance in the direction of the radar station
Recipient/Referral	Incident Commander

Message #8	
Source of the message	Tactical Lookout
Method of	Radio
Transmission	
Content of Message	Fire has escalated and is advancing closer towards the Radar
	Station
Recipient/Referral	Incident Commander













Message #9	
Source of the message	Sector Commander 1
Method of	Radio
Transmission	
Content of Message	Fire has escalated again and is, advancing closer towards the Radar
	Station.
Recipient/Referral	Incident Commander

Message #10	
Source of the message	Aerial Support Sector Coordinator
Method of	Radio
Transmission	
Content of Message	Request for briefing
Recipient/Referral	Incident Commander

Message #11	
Source of the message	Aerial Support Sector Coordinator
Method of	Radio
Transmission	
Content of Message	Request for tactical plan for aerial attack
Recipient/Referral	Incident Commander

Message #12	
Source of the message	Sector Commander 3
Method of	Radio
Transmission	
Content of Message	Increase in fire intensity and request for resources from sector
	commander
Recipient/Referral	Incident Commander

Message #13	
Source of the message	Sector Commander 1
Method of	Radio
Transmission	
Content of Message	Request for update on aerial support. Do you require a tactical
	change from Sector 1?
Recipient/Referral	Incident Commander













Message #14	
Source of the message	Sector Commander 3
Method of	Radio
Transmission	
Content of Message	Members of the public have been observed to be trapped in the village. There are potential injuries and fatalities.
Recipient/Referral	Incident Commander

Message #15	
Source of the message	Tactical Lookout
Method of	Radio
Transmission	
Content of Message	Fading light is meaning there is reduced visibility in all sectors on
	the fireground
Recipient/Referral	Incident Commander

Day 3

Message #16	
Source of the message	Sector Commander 1
Method of	Radio
Transmission	
Content of Message	Request for aerial support in Sector 1
Recipient/Referral	Incident Commander

Message #17	
Source of the message	Sector Commander 1
Method of	Radio
Transmission	
Content of Message	Request for ETA of aerial attack and confirmation of tactical plan
	for combined aerial and ground attack
Recipient/Referral	Incident Commander

Message #18	
Source of the message	Tactical Lookout
Method of	Radio
Transmission	
Content of Message	Water bombing has taken place over the top of a ground crew.
	Injuries may have been sustained. Stop water drops immediately.
Recipient/Referral	Incident Commander













Message #19	
Source of the message	Sector Commander 1
Method of	Radio
Transmission	
Content of Message	Ground crew have sustained injuries and are being withdrawn for
	medical attention. Request for an additional crew to replace the
	injured crew.
Recipient/Referral	Incident Commander

Message #20	
Source of the message	Aerial Support Sector Coordinator
Method of	Radio
Transmission	
Content of Message	Pilots require an update on the effectiveness of aerial attack
	before continuing aerial attack
Recipient/Referral	Incident Commander

Message #21	
Source of the message	Radar Station
Method of	Radio
Transmission	
Content of Message	The fire is spreading close the Radar Station. We request assistance
	to protect the Radar Station and evacuate staff on site.
Recipient/Referral	Incident Command Support Officer

Message #22	
Source of the message	Sector Commander 3
Method of	Radio
Transmission	
Content of Message	Tail fire is extinguished. Request for new tactical plan for Sector 3.
Recipient/Referral	Incident Commander

Message #23	
Source of the message	Aerial Support Sector Coordinator
Method of	Radio
Transmission	
Content of Message	Request permission to stand down aerial resources and direct them to return to Newcastle Airport for debriefing.
Recipient/Referral	Incident Commander













Message #24	
Source of the message	Police Helicopter
Method of	Radio
Transmission	
Content of Message	Infrared camera is indicating some hotspots within the
	extinguished fire perimeter. Hotspots can be seen in Sectors 1 and
	3.
Recipient/Referral	Incident Commander

END OF DOCUMENT









