

RMZ TMZ

Submission
ACP 2021 084

FEBRUARY 15

CAA

Authored by: [REDACTED]

Version: 0.1



Statement of Need3

Submission4

Appendix A – Submission TMZ.....6

Appendix B - Submission RMZ18

Appendix C – AIP Other changes21

Statement of Need

The statement of need for ACP 2021 084 was as follows,

Issue or Opportunity to be addressed.

Centralise all RMZ/TMZ data in one place within the ENR 2.2 section.

Follow ICAO and ERNIP Part 1 guidelines to update and represent the data in a clear and concise manner.

Proposed change

Change the section title of both sections to remove “En-route” from the title.

Update the layout to follow a column format, in line with the guidelines for the layout of airspace volumes contained in ENR 2.1.

Add description and pointers to AD section of relevant Airfield section for aerodrome sponsored RMZ/TMZ.

Follow ICAO and ERNIP Part 1 guidelines to update and represent the data in a clear and concise manner.

Update the data contained in ENR 2.2 RMZ/TMZ as required.

Outside of scope of this ACP

This ACP follows the current policy in these areas and does not include any change to existing policy.

Submission

The files in support of this ACP are,

Type	Filename	Version	Note
Aerodata	Scottish TMA TMZ	V1.1	This supports the grouping of 7 TMZs into one defined volume of airspace

The submission for this ACP is as follows,

Proposed Change	Note	Status
Centralise all RMZ/TMZ data in one place within the ENR 2.2 section.	All RMZ TMZ volumes described within ENR 2.2	Completed
Follow ICAO and ERNIP Part 1 guidelines to update and represent the data in a clear and concise manor.	Data has been refreshed to present it in a clear and concise manor. A new TMZ has been created for the Scottish TMA. References in ENR 2.1 have been reviewed and updated. ICAO and ERNIP guidelines followed were possible, however a change to the AIP specification would be required – lead time approximately a year. Therefore, not captured in this ACP.	Partial
Change the section title of both sections to remove “En-route” from the title.	Captured. No definition of “En-route” TMZ RMZ.	Completed
Update the layout to follow a column format, in line with the guidelines for the layout of airspace volumes contained in ENR 2.1.	The existing template for ENR 2.2 TMZ RMZ with the existing data in remarks was cluttered and unclear. I have proposed using the existing template, with a remark’s column. This may need to be refined upon submission to AIS to find an existing template.	Partial

	A change to the AIP specification would be required for a complete layout change, rather than basing the layout on existing templates – lead time approximately a year. Therefore, not captured in this ACP.	
Add description and pointers to AD section of relevant Airfield section for aerodrome sponsored RMZ/TMZ.	Upon acceptance and completion of this ACP, RMZ TMZ across ENR and AD 2.17 sections will be duplicated but aligned. ACP 2021 086 will review and update the TMZ RMZ references in the AD section.	Partial
Update the data contained in ENR 2.2 RMZ/TMZ as required.	Data has been reviewed and tidied up. Extra information has been added where appropriate. Pre amble to each data set has been proposed to make the table easier to understand.	Completed

This ACP, if approved, will bring the TMZ RMZ up to date in one location.

Further work will be needed around the AIS specification and data quality.

Appendix A – Submission TMZ

X TRANSPONDER MANDATORY ZONES

A TMZ is airspace of defined dimensions wherein the carriage and operation of pressure-altitude reporting transponders is mandatory. The requirements for transponders within a TMZ are detailed at UK AIP GEN1.5.

Hours of applicability of the TMZ are coincidental with the hours published in the Controlling Authority column. Note when no controlling authority is provided for a TMZ, then a time of applicability will be listed in this column.

A pilot wishing to operate in a TMZ without serviceable transponder equipment may be granted access subject to specific arrangements agreed with the TMZ Controlling Authority.

Name Lateral limits	Vertical Limits Classification	Controlling Authority	Remarks
Argyll CTA 1 TMZ 561844N 0054648W - 560727N 0050308W - 560127N 0044028W - 560000N 0044400W - 555356N 0045343W - 555825N 0051042W - 560939N 0055411W - 561844N 0054648W	Upper limit: FL195 Lower Limit: 5500 FT ALT Class: E	H24 Scottish Control - 127.275 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Argyll CTA 2 TMZ 564819N 0062031W - 561807N 0054423W - 561844N 0054648W - 560939N 0055411W - 562501N 0065609W - 563408N 0064847W - 562552N 0061508W -	Upper limit: FL195 Lower Limit: FL115 Class: E	H24 Scottish Control - 127.275 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.

564248N 0063539W - 564819N 0062031W			
Argyll CTA 3 TMZ 553039N 0053655W - 552543N 0050000W - 551527N 0050000W - 552057N 0054102W - 553039N 0053655W	Upper limit: FL195 Lower Limit: FL105 Class: E	H24 Scottish Control - 127.275 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Burbo Bank TMZ (Area A) 533215N 0031146W – 533213N 0031406W – 532916N 0030709W – 533215N 0031146W.	Upper limit: 3500 FT ALT Lower Limit: SFC Class: G	Mon-Thu 0730-1900 (0630-1800); Fri 0730-1700 (0630-1600) Warton Radar - 129.530 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Burbo Bank TMZ (Area B) 533213N 0031406W – 532916N 0030709W – 532704N 0030737W – 532550N 0031030W – 532550N 0031939W – 532631N 0032055W – 533213N 0031406W.	Upper limit: 2000 FT ALT Lower Limit: SFC Class: G	Mon-Thu 0730-1900 (0630-1800); Fri 0730-1700 (0630-1600) Warton Radar - 129.530 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Burbo Bank TMZ (Area C) 533211N 0032449W – 533213N 0031406W – 532631N 0032055W – 532938N 0032640W – 533211N 0032449W.	Upper limit: FL45 Lower Limit: SFC Class: G	Mon-Thu 0730-1900 (0630-1800); Fri 0730-1700 (0630-1600) Warton Radar - 129.530 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Doncaster Sheffield CTA 13 TMZ 532531N 0005037W - 531433N 0004258W -531343N 0004324W - 531600N 0005542W - 532531N 0005037W.	Upper limit: FL105 Lower Limit: FL85 Class: E	H24 Doncaster Approach - 126.225 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority, Liverpool ATC - 0151-907 1542 or radar@ATCSL.aero.

Farnborough CTA 8 TMZ 510957N 0005732W - 510602N 0005439W - 510047N 0005251W - 505435N 0010335W - 510420N 0010657W - 510636N 0010817W - 510957N 0005732W.	Upper limit: 5500 FT ALT Lower Limit: 4500 FT ALT Class: E	Mon-Fri 0700-2200 (0600-2100); Sat-Sun and PH 0800-2000 (0700-1900) Farnborough Radar - 125.250 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority, Farnborough ATC - 01252-526015 .
Farnborough CTA 9 TMZ 505739N 0004104W - 505119N 0003419W - 505119N 0005457W - 505512N 0005908W - 505739N 0004104W.	Upper limit: FL65 Lower Limit: 5500 FT ALT Class: E	Mon-Fri 0700-2200 (0600-2100); Sat-Sun and PH 0800-2000 (0700-1900) Farnborough Radar - 125.250 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority, Farnborough ATC - 01252-526015 .
Greater Wash TMZ 533420.44N 0005239.24E - 531700.01N 0013011.23E - 531206.6N 0012951.44E - 530328.42N 0011342.33E - 530531.14N 0010510.48E - 531353.77N 0004450.58E - 531727.25N 0004132.09E - 532923.10N 0003801.81E - 533333.56N 0004031.16E - 533420.44N 0005239.24E.	Upper limit: FL100 Lower Limit: SFC Class: G	0630-2200 (0530-2100) SFC - FL 65; Anglia Radar - 125.275 MHz FL65 - FL100; Swanwick Military - 133.325 MHz 2200-0630 (2100-0530) SFC - FL100; Swanwick Military - 133.325 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority. Anglia Radar backup freq 128.925 MHz.
Holyhead CTA 15 TMZ 540005N 0051032W - 535351N 0045602W - 534814N 0050951W	Upper limit: FL195 Lower Limit: FL75 Class: E	H24 Scottish Control - 123.775 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.

- 534848N 0053000W - 535207N 0053000W - 540005N 0051032W.			
Holyhead CTA 16 TMZ 540405N 0050040W - 535758N 0044548W - 535351N 0045602W - 540005N 0051032W - 540405N 0050040W.	Upper limit: FL145 Lower Limit: FL75 Class: E	H24 Scottish Control - 123.775 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority. During the notified hours of operation of the Isle of Man CTR/CTA the lower limit of the portion of the TMZ coincident with the Isle of Man CTR/CTA will be FL105.
Humber Gateway TMZ 535410N 0001037E - 534902N 0001650E - 534153N 0002245E - 533714N 0002412E - 533258N 0001703E thence in an anti- clockwise direction by an arc of a circle radius 5 NM centred on 532830N 0001315E to 533330N 0001305E - 533902N 0001056E - 534919N 0000046W - 535410N 0001037E.	Upper limit: FL100 Lower Limit: SFC Class: G	0630-2200 (0530-2100) SFC - FL 65; Anglia Radar - 125.275 MHz FL65 - FL100; Swanwick Military - 133.325 MHz 2200-0630 (2100-0530) SFC - FL100; Swanwick Military - 133.325 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority. Anglia Radar backup freq 128.925 MHz.
London Array TMZ (Area A) 513906N 0012459E - 514036N 0012507E - 514305N 0012824E - 514304N 0013112E - 514050N 0013459E - 513722N 0013646E - 513341N 0013627E - 513306N 0013414E - 513325N 0012642E - 513516N 0012327E - 513552N 0012310E - 513906N 0012459E.	Upper limit: FL65 Lower Limit: SFC Class: G	H24 Southend Radar - 130.780 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.

London Array TMZ (Area B) 513906N 0012459E - 513552N 0012310E - 513814N 0012201E - 514036N 0012507E - 513906N 0012459E.	Upper limit: 5500 FT ALT Lower Limit: SFC Class: G	H24 Southend Radar - 130.780 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
London CTR TMZ 513611N 0004133W following the line of latitude to - 513611N 0001253W thence clockwise by the arc of a circle radius 12 NM centred on 512812N 0002713W to 512013N 0001255W following the line of latitude to - 512013N 0003800W - 512103N 0004236W thence clockwise by the arc of a circle radius 12 NM centred on 512812N 0002713W to 513611N 0004133W.	Upper limit: 2500 FT ALT Lower Limit: SFC Class: D	H24 Heathrow Radar – 125.625 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority. Outside the hours 0700-2030 (0600-1930) 125.625 MHz will be monitored by Thames Radar: 0600-0700 (0500-0600) and 2030-2230 (1930-2130) or Heathrow Director: 2230-0600 (2130-0500)

London Stansted TMZ 1 515416N 0002653E thence anti-clockwise by the arc of a circle radius 8 NM centred on 515306N 0001406E to 520104N 0001503E - 520517N 0002124E thence clockwise by the arc of a circle radius 13 NM centred on 515306N 0001406E to 515828N 0003314E - 515416N 0002653E.	Upper limit: 1500 FT ALT Lower Limit: SFC Class: G	H24 Stansted Radar – 120.625 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority, Farnborough Radar on frequency 132.800 during their hours of operation 0800-2000 (0700-1900) or from Essex Radar on frequency 120.625, at other times.
London Stansted TMZ 2 514508N 0001309E - 514055N 0000652E thence clockwise by the arc of a circle radius 13 NM centred on 515306N 0001406E to 514550N 0000316W - 515146N 0000006W - 515155N 0000120E thence anti-clockwise by the arc of a circle radius 8 NM centred on 515306N 0001406E to 514508N 0001309E.	Upper limit: 1500 FT ALT Lower Limit: SFC Class: G	H24 Stansted Radar – 120.625 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority, Farnborough Radar on frequency 132.800 during their hours of operation 0800-2000 (0700-1900) or from Essex Radar on frequency 120.625, at other times.
Moray CTA 1 TMZ 573706N 0015736W - 573556N 0013910W - 573333N 0013540W - 572422N 0012815W - 570417N 0014929W thence anti-clockwise by the arc of a circle radius 10 NM centred on 570531N 0020740W to	Upper limit: FL195 Lower Limit: 4500 FT ALT Class: E	H24 Scottish Control - 134.850 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.

570845N 0015019W - 572153N 0015835W thence anti- clockwise by the arc of a circle radius 10 NM centred on 571834N 0021602W to 572100N 0023356W - 573241N 0023554W - 573613N 0021832W - 573706N 0015736W			
Moray CTA 2 TMZ 574643N 0003720W - 573731N 0003007W - 572758N 0011242W - 572422N 0012815W - 573333N 0013540W - 573708N 0012004W - 574643N 0003720W	Upper limit: FL195 Lower Limit: FL105 Class: E	H24 Scottish Control - 134.850 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 3 TMZ 591927N 0011522W - 573556N 0013910W - 573706N 0015736W - 592039N 0013445W - 591927N 0011522W	Upper limit: FL195 Lower Limit: FL105 Class: E	H24 Scottish Control - 134.850 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 4 TMZ 593033N 0013227W - 592921N 0011258W - 591927N 0011522W - 592039N 0013445W - 593033N 0013227W	Upper limit: FL195 Lower Limit: FL 75 Class: E	H24 Scottish Control - 134.850 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 5 TMZ 593331N 0013145W - 593219N 0011214W -	Upper limit: FL195 Lower Limit: FL45 Class: E	H24 Scottish Control - 134.850 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.

592921N 0011258W - 593033N 0013227W - 593331N 0013145W			
Moray CTA 6 TMZ 582757N 0025607W - 573613N 0021832W - 573241N 0023554W - 581914N 0031000W - 582451N 0025723W - 582757N 0025607W	Upper limit: FL155 Lower Limit: FL75 Class: E	H24 Scottish Control - 134.850 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 7 TMZ 585837N 0030305W - 585632N 0024412W - 582451N 0025723W - 575213N 0040909W - 575449N 0043204W - 580345N 0041248W - 582356N 0032847W - 583014N 0031440W - 585837N 0030305W	Upper limit: FL195 Lower Limit: FL75 Class: E	H24 Scottish Control - 134.850 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 8 TMZ 575820N 0050530W - 574511N 0042339W - 575449N 0043204W - 575213N 0040909W - 573320N 0035256W - 571206N 0035820W - 571327N 0041634W - 572958N 0041230W - 573700N 0043424W - 574940N 0051447W - 575820N 0050530W	Upper limit: FL195 Lower Limit: FL95 Class: E	H24 Scottish Control - 127.275 MHz Scottish Control - 134.800 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.

Moray CTA 9 TMZ 581645N 0060617W - 575820N 0050530W - 574940N 0051447W - 580805N 0061540W - 581645N 0060617W	Upper limit: FL195 Lower Limit: FL55 Class: E	H24 Scottish Control - 127.275 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 10 TMZ 571327N 0041634W - 571206N 0035820W - 564120N 0040600W - 564239N 0042359W - 571327N 0041634W	Upper limit: FL195 Lower Limit: FL105 Class: E	H24 Scottish Control - 127.275 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 11 TMZ 564239N 0042359W - 564120N 0040600W - 562708N 0040928W - 562827N 0042720W - 564239N 0042359W	Upper limit: FL195 Lower Limit: FL125 Class: E	H24 Scottish Control - 127.275 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 12 TMZ 564239N 0042359W - 564120N 0040600W - 562708N 0040928W - 562827N 0042720W - 564239N 0042359W	Upper limit: FL125 Lower Limit: FL105 Class: E	By NOTAM Scottish Control - 127.275 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority. Activation of the airspace will be during Exercise Joint Warrior and other large military exercises as notified to facilitate access to ATS Route N560.
Moray CTA 13 TMZ 562827N 0042720W - 562708N 0040928W - 561235N 0041258W - 560432N 0043253W - 562827N 0042720W	Upper limit: FL195 Lower Limit: 5500 FT ALT Class: E	By NOTAM Scottish Control - 127.275 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority. Activation of the airspace will be during Exercise Joint Warrior and other large

			military exercises as notified to facilitate access to ATS Route N560.
Moray CTA 16 TMZ 595319N 0012703W - 595207N 0010721W - 593219N 0011214W - 593331N 0013145W - 595319N 0012703W	Upper limit: FL195 Lower Limit: FL100 Class: E	H24 Scottish Control - 134.850 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray CTA 17 TMZ 572453N 0023020W thence clockwise by the arc of a circle radius 10 NM centred on 571834N 0021602W to 572153N 0015835W - 572100N 0015802W - 571755N 0015605W - 571542N 0020528W - 571940N 0020701W - 571838N 0021602W - 572130N 0022334W - 571920N 0022624W - 572453N 0023020W	Upper limit: FL195 Lower Limit: FL115 Class: E	As notified by NOTAM Scottish Control - 124.500 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.
Moray Firth TMZ 581352.7801N 0023029.6207W - 580642.1273N 0023023.4770W - 580122.6972N 0025655.4542W - 581152.8636N 0030449.3381W - 581434.3990N 0030233.8130W - 581936.1622N 0025802.6109W - 582151.1871N 0025310.7227W -	Upper limit: FL100 Lower Limit: SFC Class: E/G	H24 Lossie Departures - 119.575 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.

582116.1994N 0024224.5231W - 581352.7801N 0023029.6207W.			
Scottish TMA TMZ 551214.00N 0050234.00W - 551511.00N 0050000.00W - 554334.00N 0050000.00W - 555000.00N 0050000.00W - 560000.00N 0044400.00W - 561400.00N 0040926.00W - 561400.00N 0033259.00W - 560700.00N 0032938.00W - 560700.00N 0025608.00W - 560008.00N 0024849.00W - 553100.00N 0025156.00W - 552700.00N 0030000.00W - 550603.00N 0041419.00W.	Upper limit: FL100 Lower Limit: 6000 FT ALT Class: D	H24 Scottish Control - 121.375 MHz 126.300 MHz 130.975 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority. Secondary frequency available 124.825 MHz.
Seagreen TMZ (Phase 1) 562848.316N 0015621.635W - 562856.706N 0015742.338W - 562919.903N 0015849.297W - 562953.266N 0015935.362W - 563026.418N 0015955.875W - 563100.251N 0015959.339W - 564040.162N 0015951.322W - 564116.339N 0015940.636W - 564144.708N 0015915.968W - 564214.164N 0015826.478W - 564232.981N 0015722.075W - 564239.062N 0015613.168W -	Upper limit: FL100 Lower Limit: SFC Class: D/G	H24 No Controlling Authority.	Aircraft without serviceable transponder equipment shall not enter the TMZ. Flight Information Service Available H24 SFC - FL 55; Scottish FIS - 119.875 MHz TMZ partly sits within TAY CTA 12. No controlling authority – see CAP 1885 (ACP 2019 025)

564235.348N 0013542.561W - 564222.592N 0013428.108W - 564158.290N 0013326.897W - 564124.944N 0013212.864W - 564052.426N 0013126.112W - 563235.237N 0012554.843W - 563155.589N 0012541.776W - 563107.564N 0012558.881W - 563024.930N 0012653.949W - 563001.552N 0012804.526W - 562953.254N 0012938.623W - 562848.316N 0015621.635W.			
Walney TMZ 540745.1N 0033800.0W - 535910.5N 0032140.2W - 535529.17N 0032639.34W - 540636.13N 0035541.49W - 540823.51N 0035539.10W - 540804.0N 0035336.0W - 541049.0N 0034630.0W thence anti-clockwise by the arc of a circle radius 15 NM centred on 541900.0N 0032505.0W to 540634.0N 0033920W - 540745.1N 0033800.0W.	Upper limit: FL100 Lower Limit: SFC Class: G	Mon-Thu 0730-1900 (0630- 1800); Fri 0730-1700 (0630- 1600) Warton Radar - 129.530 MHz	Aircraft without serviceable transponder equipment subject to specific approval of the Controlling Authority.

Appendix B - Submission RMZ

X RADIO MANDATORY ZONES

An RMZ is airspace of defined dimensions wherein the carriage and operation of suitable/appropriate radio equipment is mandatory. The requirements for communications within an RMZ are detailed in GEN1.5.

A pilot wishing to operate in an RMZ without the necessary radio communication equipment may be able to do so in accordance with conditions promulgated for the specific RMZ, or in accordance with agreed tactical arrangements with the RMZ Controlling Authority.

Designation Lateral Limits	Vertical Limits Classification	Controlling Authority	Remarks
Doncaster Sheffield CTA 13 RMZ 532531N 0005037W - 531433N 0004258W - 531343N 0004324W - 531600N 0005542W - 532531N 0005037W	Upper limit: FL 105 Lower Limit: FL 85 Class: E	H24 Doncaster Approach - 126.225 MHz	Aircraft without serviceable equipment subject to specific approval of the Controlling Authority, Liverpool ATC - 0151-907 1542 or radar@ATCSL.aero.
Ekofisk RMZ 563540N 0023642E - 564217.13N 0025020.57E thence clockwise by the arc of a circle radius 5 NM centred on 563832N 0025619E (Albuskjell A) to 564331.37N 0025620.42E - 564328.36N 0031935.09E thence clockwise by the arc of a circle radius 5 NM centred on 563829N 0031932E (Tor) to 563931.88N 0032823.33E -	Upper limit: 1500 FT ALT Lower Limit: SFC Class: G	Ekofisk HFIS - 130.550 MHz	

561207.00N 0033843.00E (DANOR) - 560510N 0031455E - 563540N 0023642E.			
Hawarden RMZ 1 531309N 0025059W - 530940N 0025059W - 531427N 0030140W - 531309N 0025059W	Upper limit: 2500 FT ALT Lower Limit: SFC Class: G	Mon-Fri 0745-1930 (0645-1830); Sat-Sun & PH 0830-1800 (0730- 1700) Hawarden Radar – 120.055 MHz	Aircraft without serviceable equipment subject to specific approval of the Controlling Authority. For conditions of RMZ entry see EGNR AD 2.22 Flight Procedures.
Hawarden RMZ 2 530940N 0025059W - 530823N 0025059W - 530400N 0025720W - 530845N 0031227W - 531525N 0030250W - 531427N 0030140W - 530940N 0025059W	Upper limit: 3000 FT ALT Lower Limit: SFC Class: G	Mon-Fri 0745-1930 (0645-1830); Sat-Sun & PH 0830-1800 (0730- 1700) Hawarden Radar – 120.055 MHz	Aircraft without serviceable equipment subject to specific approval of the Controlling Authority. For conditions of RMZ entry see EGNR AD 2.22 Flight Procedures.
Hawarden RMZ 3 530400N 0025720W - 530000N 0030305W following the line of latitude to - 530000N 0030711W - 530321N 0031150W - 530845N 0031227W - 530400N 0025720W	Upper limit: 4500 FT ALT Lower Limit: SFC Class: G	Mon-Fri 0745-1930 (0645-1830); Sat-Sun & PH 0830-1800 (0730- 1700) Hawarden Radar – 120.055 MHz	Aircraft without serviceable equipment subject to specific approval of the Controlling Authority. For conditions of RMZ entry see EGNR AD 2.22 Flight Procedures.
Land's end RMZ 501705N 0055014W - 501703N 0053706W - 500950N 0052951W - 495559N 0053109W - 495602N 0055051W - 494924N 0061338W thence clockwise by the arc of a circle radius 6 NM centred on	Upper limit: 4000 FT ALT Lower Limit: SFC Class: G	Mon-Fri 0815-1730 (0710-1730); Sat 0815-1215 (0710-1730) Lands End Tower – 120.255 MHz	Aircraft without serviceable equipment subject to specific approval of the Controlling Authority. ATS Unit callsign: Entering from East: Land's End Tower (eng)

495451N 0061728W (STM NDB) to 500009N 0062148W - 500907N 0055514W - 501705N 0055014W			OR Culdrose Approach (eng). Entering from West: Scillies Approach (eng).
---	--	--	---

Appendix C – AIP Other changes

Change to GEN 1.5 to remove duplication of data.

Section	Reference	Current	Proposed
GEN 1.5 5.1.6	Radio Mandatory Zones (RMZ)	<p>For the purposes of SERA.6005, the following airspace is notified as a 'RMZ':</p> <p>Hawarden RMZ (permanent);</p> <p>Ekofisk RMZ;</p> <p>Doncaster Sheffield Airport CTA 13;</p> <p>Land's End RMZ.</p> <p>5.1.7 En-route RMZs are detailed at ENR 2.2, subsection 5, and aerodrome specific RMZs are detailed in the Aerodrome Index – Specific.</p> <p>5.1.8 Temporary RMZs put in place to meet urgent operational requirements may not be incorporated in the AIP due to their limited duration. They will be notified through appropriate means including NOTAM and AIC.</p>	<p>For the purposes of SERA.6005, the airspace notified as a 'Radio Mandatory Zone' is listed in ENR 2.2.</p>

<p>GEN 1.5 5.3.2.2</p>	<p>Notified 'Transponder Mandatory Zone' Airspace</p>	<p>For the purposes of the UK Air Navigation Order and SERA.6005, the following airspace is notified as a 'Transponder Mandatory Zone':</p> <p>The vertical and lateral boundaries of Scottish TMA 1, 2, 3, 4 & 5 between 6000 FT ALT and FL 100 as detailed in ENR 2.1.</p> <p>The vertical and lateral boundaries of Scottish TMA 6 & 7 as detailed in ENR 2.1.</p> <p>The vertical and lateral boundaries of the London Control Zone as detailed in AD2-EGLL.</p> <p>The vertical and lateral boundaries of the Stansted TMZ as detailed in AD2-EGSS.</p> <p>The vertical and lateral boundaries of the Farnborough TMZ as detailed in AD2-EGLF.</p> <p>The vertical and lateral boundaries of the London Array TMZ as detailed in ENR 2.2 Paragraph 4.</p> <p>The vertical and lateral boundaries of the Humber Gateway TMZ as detailed in ENR 6-25 and ENR 2.2 Paragraph 4.</p>	<p>For the purposes of the UK Air Navigation Order and SERA.6005, the airspace notified as a 'Transponder Mandatory Zone' is listed in ENR 2.2.</p>
----------------------------	---	--	---

		<p>The vertical and lateral boundaries of the Burbo Bank TMZ as detailed in ENR 6-28 and at ENR 2.2 Paragraph 4.</p> <p>The vertical and lateral boundaries of the Walney TMZ as detailed in ENR 6-28 and at ENR 2.2 Paragraph 4.</p> <p>The vertical and lateral boundaries of Argyll CTAs 1, 2 & 3 as detailed in ENR 2.1.</p> <p>The vertical and lateral boundaries of Moray CTA (except Moray CTAs 14 & 15) as detailed in ENR 2.1.</p> <p>The vertical and lateral boundaries of Holyhead CTAs 15 & 16 as detailed in ENR 2.1.</p> <p>The vertical and lateral boundaries of the Moray Firth TMZ as detailed in ENR 2.2 Paragraph 4.</p>	
--	--	--	--

Review the collocated CTAs listed above in ENR2.1 and edit the remarks.

Section	Reference	Current	Proposed
---------	-----------	---------	----------

ENR 2.1	ARGYLL CTA 1	<p>Part of ATS Route L602 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Route L602 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>
ENR 2.1	ARGYLL CTA 2	<p>Part of ATS Route L602 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Route L602 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>
ENR 2.1	ARGYLL CTA 3	<p>Part of ATS Route L602 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Route L602 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>
ENR 2.1	Doncaster Sheffield CTA 13	<p>CTA Chart Published in AD-2 Section.</p> <p>Doncaster Sheffield CTA 13 is a TMZ/RMZ (Transponder and Radio Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory. Carriage and operation of equipment capable of maintaining direct two-way communication with ATC on the notified frequency is mandatory. Provisions for non-equipped aircraft are promulgated by the controlling authority,</p>	<p>Co-located RMA and TMZ see ENR 2.2 for details.</p> <p>CTA Chart Published in AD-2 Section.</p>

		Liverpool ATC - (0151-907 1542) or (radar@ATCSL.aero).	
--	--	---	--

ENR 2.1	FARNBOROUGH CTA 8	<p>IFR aircraft within this airspace may be under the control of Farnborough Radar, Solent Radar or London Control.</p> <p>VFR aircraft are strongly recommended to seek a service from Farnborough Radar when transiting this Class E Airspace.</p> <p>Farnborough CTA 8 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory. Provisions for non-equipped aircraft are promulgated by the controlling authority 01252-526015 (ATC-Radar).</p> <p>CTA Chart published in AD-2 Section.</p>	<p>IFR aircraft within this airspace may be under the control of Farnborough Radar, Solent Radar or London Control.</p> <p>VFR aircraft are strongly recommended to seek a service from Farnborough Radar when transiting this Class E Airspace.</p> <p>Co-located TMZ see ENR 2.2 for details.</p> <p>CTA Chart published in AD-2 Section.</p>
---------	-------------------	--	---

ENR 2.1	FARNBOROUGH CTA 9	<p>IFR aircraft within this airspace may be under the control of Farnborough Radar, Solent Radar or London Control.</p> <p>VFR aircraft are strongly recommended to seek a service from Farnborough Radar when transiting this Class E Airspace.</p> <p>CAUTION: The ceiling of Farnborough CTA 9 is FL 65 regardless of QNH, with Class A London TMA Airspace immediately above.</p> <p>Farnborough CTA 9 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory. Provisions for non-equipped aircraft are promulgated by the controlling authority 01252-526015 (ATC-Radar).</p> <p>CTA Chart published in AD-2 Section.</p>	<p>IFR aircraft within this airspace may be under the control of Farnborough Radar, Solent Radar or London Control.</p> <p>VFR aircraft are strongly recommended to seek a service from Farnborough Radar when transiting this Class E Airspace.</p> <p>CAUTION: The ceiling of Farnborough CTA 9 is FL 65 regardless of QNH, with Class A London TMA Airspace immediately above.</p> <p>Co-located TMZ see ENR 2.2 for details.</p> <p>CTA Chart published in AD-2 Section.</p>
ENR 2.1	HOLYHEAD CTA 15	<p>Part of ATS Route Y911 is incorporated within the CTA.</p> <p>Note: Holyhead CTA 15 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with</p>	<p>Part of ATS Route Y911 is incorporated within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>

		Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.	
ENR 2.1	HOLYHEAD CTA 16	<p>Part of ATS Route Y911 is incorporated within the CTA.</p> <p>Note 1: Holyhead CTA 16 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.</p> <p>Note 2: During the notified hours of operation of the Isle of Man CTR/CTA the lower limit of the portion of the CTA coincident with the Isle of Man CTR/CTA will be FL 105.</p>	<p>Part of ATS Route Y911 is incorporated within the CTA.</p> <p>During the notified hours of operation of the Isle of Man CTR/CTA the lower limit of the portion of the CTA coincident with the Isle of Man CTR/CTA will be FL 105.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>
ENR 2.1	MORAY CTA 1	<p>Part of ATS Routes P600, Y904 and Y905 are contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Routes P600, Y904 and Y905 are contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>
ENR 2.1	MORAY CTA 2	<p>Part of ATS Route P600 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Route P600 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>

ENR 2.1	MORAY CTA 3	Part of ATS Route Y905 is contained within the CTA. Class E + TMZ (Transponder Mandatory Zone).	Part of ATS Route Y905 is contained within the CTA. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	MORAY CTA 4	Part of ATS Route Y905 is contained within the CTA. Class E + TMZ (Transponder Mandatory Zone).	Part of ATS Route Y905 is contained within the CTA. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	MORAY CTA 5	Part of ATS Route Y905 is contained within the CTA. Class E + TMZ (Transponder Mandatory Zone).	Part of ATS Route Y905 is contained within the CTA. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	MORAY CTA 6	Part of ATS Route Y904 is contained within the CTA. Class E + TMZ (Transponder Mandatory Zone).	Part of ATS Route Y904 is contained within the CTA. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	MORAY CTA 7	Part of ATS Route N560 is contained within the CTA. Class E + TMZ (Transponder Mandatory Zone).	Part of ATS Route N560 is contained within the CTA. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	MORAY CTA 8	Part of ATS Route N560 is contained within the CTA.	Part of ATS Route N560 is contained within the CTA.

		Class E + TMZ (Transponder Mandatory Zone).	Co-located TMZ see ENR 2.2 for details.
ENR 2.1	MORAY CTA 9	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p> <p>Minimum Flight Altitude 5200 FT.</p>	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p> <p>Minimum Flight Altitude 5200 FT.</p>
ENR 2.1	MORAY CTA 10	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>
ENR 2.1	MORAY CTA 11	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>
ENR 2.1	MORAY CTA 12	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p> <p>Activation of the airspace will be during Exercise Joint Warrior and other large military</p>	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p> <p>Activation of the airspace will be during Exercise Joint Warrior and other large military exercises as notified to facilitate access to ATS Route N560.</p>

		exercises as notified to facilitate access to ATS Route N560.	
ENR 2.1	MORAY CTA 13	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p> <p>Activation of the airspace will be during Exercise Joint Warrior and other large military exercises as notified to facilitate access to ATS Route N560.</p>	<p>Part of ATS Route N560 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p> <p>Activation of the airspace will be during Exercise Joint Warrior and other large military exercises as notified to facilitate access to ATS Route N560.</p>
ENR 2.1	MORAY CTA 16	<p>Part of ATS Route Y905 is contained within the CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Route Y905 is contained within the CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>
ENR 2.1	MORAY CTA 17	<p>Part of ATS Routes P600 and Y904 are incorporated within this CTA.</p> <p>Class E + TMZ (Transponder Mandatory Zone).</p>	<p>Part of ATS Routes P600 and Y904 are incorporated within this CTA.</p> <p>Co-located TMZ see ENR 2.2 for details.</p>

ENR 2.1	SCOTTISH TMA 1	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Within the lateral boundaries of Scottish TMA 1 between 6000 FT ALT and FL 100 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	SCOTTISH TMA 2	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Within the lateral boundaries of Scottish TMA 2 between 6000 FT ALT and FL 100 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	SCOTTISH TMA 3	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Within the lateral boundaries of Scottish TMA 3 between 6000 FT ALT and FL 100 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Co-located TMZ see ENR 2.2 for details.

ENR 2.1	SCOTTISH TMA 4	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Within the lateral boundaries of Scottish TMA 4 between 6000 FT ALT and FL 100 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	SCOTTISH TMA 5	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Within the lateral boundaries of Scottish TMA 5 between 6000 FT ALT and FL 100 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Co-located TMZ see ENR 2.2 for details.
ENR 2.1	SCOTTISH TMA 6	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Within the lateral boundaries of Scottish TMA 6 between 6000 FT ALT and FL 100 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar.

ENR 2.1	SCOTTISH TMA 7	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar. Within the lateral boundaries of Scottish TMA 7 between 6000 FT ALT and FL 100 is a TMZ (Transponder Mandatory Zone). Carriage and operation of a transponder with Mode A code and Mode C altitude (or equivalent Mode S) is mandatory.	Inbound traffic operating at or cleared to a level FL85 is likely to be in communication Glasgow, Edinburgh or Prestwick Radar.
ENR 2.1	TAY CTA 12	Part of ATS Route P18 is contained within the CTA. Fri (or the day preceding a PH) 1500 (1400) to Mon (or the day following a PH) 1000 (0900); Tue-Fri 0530-0900 (0430-0800). Additionally available overnight, May-Sep, Mon-Thu (1900-0900). (See GEN 2.1, para 6 for Scottish public holidays). The airspace is not available for use during these periods when MoD require access to the airspace.	Part of ATS Route P18 is contained within the CTA. Fri (or the day preceding a PH) 1500 (1400) to Mon (or the day following a PH) 1000 (0900); Tue-Fri 0530-0900 (0430-0800). Additionally available overnight, May-Sep, Mon-Thu (1900-0900). (See GEN 2.1, para 6 for Scottish public holidays). The airspace is not available for use during these periods when MoD require access to the airspace. Partially co-located with Seagreen TMZ see ENR 2.2 for details. Aircraft not meeting the requirements for transponders detailed at UK AIP GEN1.5 shall not enter this TMZ.