Tunnocks Tour of Mull 2005



RAYNET
Operations Guide

Pre-Event Network Channels

The following channels will be provisioned before the event network is fully established. Operators may use these for their own testing purposes. These frequencies are subject to change. Final listings can be collected at the Friday briefing meeting.

North Net

Channel 1	144.650	Glen Aros & Aros Bridge
Channel 2	144.625	East Hill Rd & Glen.Bellart
Channel 3	144.550	Mishnish West, Croig & Sunipol
Channel 4	144.525	Calgary & Burg, Griburn
Channel 5	144.675	Tobermory, Mishnish East
Channel 10	433.750	Torloisk Junction

South Net

Channel 6	145.575	Ulva Ferry to Torloisk
Channel 7	144.700	Gribun & Loch na Keal
Channel 8	144.725	Ardtun and Scridain
Channel 9	144.750	Craignure

Unused Frequencies

144.575 and 144.600 145.250 to 145.550
430.000 to 430.550 430.750 to 431.500 432.500 to 432.800 435.000 to 438.200



Strathclyde RAYNET Group Tour of Mull 2005

Guide For Operators

This document must be read in conjunction with the Safety Manual

Introduction

This is our Twenty Second year operating as Raynet for the Tour of Mull Rally.

This years route is identical to last years so should not present any surprises.

This year sees the extension of the use of the MSA safety radio system (81MHz MSA Safety and Medical channel and 2 UK General channels) to all of the stages – this may mean you do not hear as much of the routine rally traffic as before but the main stage status information will still be passed to Rally Control via Raynet

If you can assist in installing and later recovering our Talk-Through System this would be appreciated, and gives you an opportunity to explore the more remote and picturesque parts of the island.

We again intend to have an informal Social Evening at 7.00pm on the Sunday, followed by wash down meeting at 8.30pm where you have the chance to express your valued comments. The venue will again be the Salen Hotel with a format similar to last years.

(Remember 11.00am Friday, 14th October, Isle of Mull Hotel, Craignure, is the final briefing meeting.)

Enjoy yourself, behave and drive responsibly and add to our good reputation.

Contacts During the Event (contact first on the net)

Deputy Group Controller	Crawford	GM8HBY
Engineering	Adrian	GM1FML
Equipment Distribution	Kenny Rik	GM1MMK GM8TT

Telephone Numbers

RAYNET Control, Salen Hotel 01680 300 599 (For emergency use only)

Arrival Frequencies

Strathclyde RAYNET Group frequency 145.225 MHz. Control will also be monitoring the MSA Safety & Medical Channel (81.5750MHz) and MSA "Red" (UK General 86.3750MHz) for the local area around Salen.

Overview of the Event

This is the 36th year of the Tour of Mull. Throughout its history it has had a unique status in the world of Motorsport. The event is organised by the 2300 Club, formerly the Mullard Motor Cycle and Car Club. The MMCCC initials were later translated to the 2300 Club. The first Tour of Mull Rally took place in 1969. In recent years the rally has been run on closed roads, 1990 being the first event after the Act of Parliament was passed. When the Act is in operation the road ceases to be a public highway providing over 160 miles of closed road competition for up to 150 competitors. The road is closed throughout its length at the time stated in the safety schedule and may be opened earlier than the published time by the passage of a marked road-opening car.

Briefing Meeting

One important briefing meeting will take place for all Radio operators. **Isle of Mull Hotel, Craignure on Friday Morning, 14**th **October, 11.00am.** If you cannot make this meeting, please ensure that you contact Control at Salen as soon as possible thereafter to arrange collection of the final technical updates and operator positions.

Signing On

All Marshals, Rally Officials and Radio personnel are required to sign the official MSA signing-on sheet. Signing on sheets will be available at:

Isle of Mull Hotel, Craignure

Location testing

The net will be controlled (almost continuously) from 1200 Hrs Friday to end of rally. It is suggested that you test your link to control for your Friday, Saturday afternoon and Saturday night locations. Please do this on the Friday, prior to 1700 hours, and report any problems to the engineering team. It may be too late to make any changes on Friday night but problems notified on the Friday, prior to 1700 hours, can be worked around.

RAYNET Image

It is important that you display the Tour of Mull RADIO sign supplied by 2300 Club and the standard MSA Radio symbol if you have one. Please note however it is the policy of Strathclyde RAYNET Group NOT to use vehicle beacons and we request that you do not do so while on the island. In previous years there has been an amount of confusion caused by people displaying RAYNET insignia while not on Raynet duty (e.g. wearing jackets while spectating). Please only wear your jackets etc. when on actual RAYNET duty.

Please advise RAYNET CONTROL of any RAYNET signs you observe that are likely to cause confusion should an emergency occur.

Getting to your position

You may find that the road closes (very early) making it appear you must spend (too many) hours away from your accommodation. Careful pre-parking of your car may assist. A note of the actual road closure times can be found in the appendix at the rear of this document. Road closure times for individual stages are published in the Safety Manual

A list of operator positions has been provided. Be aware that you MUST collect final information from the Isle of Mull Hotel or from Salen Hotel on the Friday as pre event draft documentation will probably change.

Overview of Operator positions

Start Operators

It is suggested that you be in position at least 30 minutes before road closure time and make yourself known to the Stage Commander and MSA Radio operator. Arrange to take up a position which will allow you to liaise with the Stage commander and MSA Radio operator. Use the tactical callsign "Start X". In the event of an incident and the Stage Commander going into the stage, you should remain at the start and be prepared to relay information from the incident. The stage Recovery vehicle will travel to any incident to act as the communications link. You should keep a timed log of any officials, doctors etc entering the stage and note the time the stage was stopped at and the numbers of the last 3 competitors to enter the stage. Control will require this information once the incident has been dealt with.

Stage Finish

The notes for start operators (above) apply equally to Finish operators. You will be working with the Deputy Stage Commander and Finish MSA Radio operator at the stop line (not the flying finish) of your stage. Use the tactical callsign "Finish X".

Reporting Official Rally Cars & Competitors

All stations should routinely report (by number, not designation), the arrival/passage TIME of the Flying Control Car (00) and first competitive car. Start and Finish operators should obtain the actual official rally time from their marshals

A typical report may be "Car 00 arrived F1 20:04".

All other official vehicles are being tracked by APRS and should not be routinely reported. Control may ask for a status update if it has "Lost" any of these vehicles

Also required are the numbers of the last 3 cars and the total number of *competitive* cars in and out of the stage together with numbers and locations of all cars known to be "Off" in the stage. This information should be available from the co-sited MSA operator

You may wish for your own information to log the number of cars as they pass through your location.

Please retain this information so that in the event of a query after your stage has been stood down the information is still readily available.

Control Link Operators

Control Link operators should be co-sited with the MSA radio controller for the stage. The location is given in the operator position schedule. Note this location may not be on the actual stage.

You should plan to be operational about the same time as the related stage, i.e. at least 30 minutes before road closure.

You will be the direct contact from the MSA radio controller back to rally HQ.

Details of any incidents on the stage should be relayed to Control together with any routine admin information that the Rally officials in control require.

Insurance Notice

Signing On

You **MUST** do this. It will provide you with whatever additional cover the Rally has provided.

Closed Roads and Rally Participation

Your own car insurance will give you what you expect up to the point where "you enter a closed road section or a rally stage or an off road section."

Beyond this point you are on your own!

Take this into consideration while driving.

RAYNET Insurance

Provides cover for third party involvement, e.g. mast falling on others etc. It does not provide ANY motor or personal equipment insurance.

Stage close down procedure

You MUST remain in your position until you meet all the following criteria.

- All running competitive cars have passed your position or "Out of Time Limit" has been applied.
- The "Road Opening Car", which opens the road to the public, has passed your location.
- 3 You have received permission from Control to stand down.

Notes:

Do not ask Control for permission to stand down until the road opening car has reached your location.

Control may require you to remain at your location, even if all your marshals have left, for safety reasons, which may not be explained over the air.

If a passage control is manned by radio you should note that the opening car may take a route that does not pass your position. Automatically stand down when the finish of the previous stage does so.

Use common sense when asking for permission to stand down (Control also wants to get you away) and wait for the short time it takes to tie up all the loose ends at the end of the stage.

If possible, continue to MONITOR your control for some time after being stood down, especially if you were a start or finish operator. Control may require confirmation of some facts relating to your stage.

CONTROLLED NET OPERATION

Friday 14th October (1200 hours) - Sunday 16th October (close final stage)

IMPORTANT

The volume of radio traffic, particularly prior to stage opening can be very high. To aid net management the following radio procedures should be used. **Please assist by identifying and testing your first and subsequent locations during the Friday, prior to 1700 hrs.** The net will be controlled from 1200 hours Friday. Make test calls via Control.

When operating through the talkthrough systems used on this event it is necessary to **leave a short pause**, between keying the microphone and speaking, to allow for all the talkthroughs in the chain to switch to transmit.

Motorsport is dangerous. Always leave a pause for URGENT or PRIORITY traffic.

GENERAL

- 1 Listen on the net frequency at all times when active on an event.
- All calls to be made through CONTROL.

 Avoid direct transmissions and requests for talkthrough unless the message is lengthy or complicated.
- Write messages before transmission to ensure clarity.
- Address all messages. A correctly addressed message sent to control will probably be overheard by the destination station and will only require to be "acknowledged".
- 5 Use plain language not codes so that your marshal can understand.
- 6 Listen and update your marshal with RELEVANT information overheard (i.e. Stage 2 now active). It may save him asking you to radio for information.

CHECK REPORTS (CS#1 = Callsign 1)

1 **Radio checks** good readable, fair readable, poor, broken, nothing heard.

Control> this is <CS#1> Radio check over
Position status
Control> this is <CS#1> Doctor & Rescue arrived F5 over
Index check (Bingo Ticket)
Control> this is <CS#1> Index 27 over
CS#1> this is <Control> Your index 27 EQUATES

CALLSIGNS & TACTICAL CALLSIGNS

Callsigns are required when first joining the net, on leaving it, and on the first occasion if 15 minutes has elapsed since your last transmission. Whilst participating in the net you are not obliged to transmit your callsign while making contact with control. A suitable point to transmit your callsign is before the final 'out' at the end of message passing. Unnecessary callsigns should not be transmitted.

Car 33 out

On a large event where members of many groups are involved it is more convenient to use a meaningful callsign than amateur callsigns. Callsigns such as Foxtrot 6, meaning 'finish of stage 6', enable Control & outstations to immediately identify where a station is located.

Use Tactical callsigns for all except licence requirements.

FIGURES

Figures are sent as in normal speech, unless conditions are bad when they can be sent digit-by-digit preceded by the proword FIGURES. To assist writing and identification of missing figures send figures in groups of two.

"2359 hours" NORMAL "twenty three fifty nine hours" or BAD CONDITIONS "figures two three - five nine hours"

Do not repeat car numbers except when communications are poor.

PROWORDS

1 Repetitions by sender (for emphasis only) I SAY AGAIN

<CS#1> this is <CS#2> move now I say again now over

2 Repetitions by receiver

SAY AGAIN

<cs#2> this is <cs#1>TEXT over</cs#1></cs#2>	<cs#1> say again over</cs#1>
<cs#2> this is <cs#1> Grid 12 34 56 over</cs#1></cs#2>	<cs#1> say again Grid over</cs#1>

SAY AGAIN WORD AFTER ...FROM... ...TO...

<cs#2> this is <cs#1> no doctor at Torloisk junction</cs#1></cs#2>	<cs#1> say again word after Torloisk over</cs#1>
over	
<cs#2> this is <cs#1> recovery vehicle for rolled car</cs#1></cs#2>	<cs#1> say again from rolled to Gribun over</cs#1>
required at Gribun over	

SAY AGAIN WORD BEFORE / ALL AFTER / ALL BEFORE

These are used as described above. The "catchword" (last correct word or phrase) must always be used.

3 Verifying/Confirm

C	O	R	R	F	C1	Γ	W	/R	O	N	G	

<cs#1> this is <cs#2> reference report on incident</cs#2></cs#1>	<cs#2> this is <cs#1> correct over</cs#1></cs#2>
verify grid 12 34 56 and 12 30 hours over	
<cs#1> this is <cs#2> reference report on meeting</cs#2></cs#1>	<cs#2> this is <cs#1> wrong grid 12 04 56 and 12 35</cs#1></cs#2>
verify grid 12 34 56 and 12 30 hours over	hours over

4 Arranging voice conversations (not common) FETCH SPEAKING

<cs#2> this is <cs#1></cs#1></cs#2>	<cs#1> wait out</cs#1>	<cs#2> this is <cs#1></cs#1></cs#2>	<cs#1> medical officer</cs#1>
fetch organiser over		organiser speaking over	speaking. etc.

5 Relay procedure

REL	AY.	TO	
-----	-----	----	--

<cs#2> this i</cs#2>	S	<cs#2> Roger out</cs#2>	<cs#3> this is</cs#3>	<cs#3> Roger out</cs#3>	<cs#1> this is</cs#1>
<cs#1> relay</cs#1>	to '	to you	<cs#2> from</cs#2>		<cs#2> message</cs#2>
<cs#3>TE</cs#3>	XT		<cs#1>TEXT</cs#1>		passed out
over			over		

6 Formal Standardised Reports SITREP SEND

When information is passed in a standardised form it will be offered using the relevant proword.

<cs#2> this is <cs#1> SITREP</cs#1></cs#2>	<cs#2> SEND over</cs#2>	<cs#1> SITREPTEXTover</cs#1>	
over			

7 Messages

MESSAGE

CONTINUES ENDS

Messages will be offered when a written copy has to be produced or the sender wishes to ensure contact.

Must be sent at dictation speed, with breaks if lengthy to allow for a priority call.

<cs#2> this is</cs#2>	<cs#2> SEND over</cs#2>	<cs#1> message</cs#1>	⇒ continues	<cs#2> received</cs#2>
<cs#1> message</cs#1>		to from	ends. over	out
over		begins break		
		⇒		

MESSAGE PRIORITY PREFIX

(None) All messages are routine unless more important.

Do NOT use the word ROUTINE it only wastes time.

Relevant Only use to correct information you are certain about or genuinely

assists. Do NOT join in for the sake of it.

Safety I wish to interrupt the traffic at the earliest convenient point.

Use for 1st Car in stage, stage live, Car overdue, Spectator

problems..

Urgent I wish to interrupt the traffic.

This jumps the queue of outstanding messages.

ONLY use when your message has become URGENT. E.g.

suspected Injury, Stage Blocked, Stage Stopped

Priority Confirmed Injury, Fire, Life or Death Situation.

OTHER EXPRESSIONS

AcknowledgeInstruction to receive station to acknowledge receiptFromPrecedes calling station's callsign or message originator

Go Ahead Permission from Control for traffic to proceed
Nothing Heard No signals received from specified station
Out End of transmission; no reply expected

Out To You End of transmission to you; further calls to other stations follow Over End of transmission; a reply or acknowledgment expected

Received Your last transmission received OK

Roger As Received Say Again Repeat

Send You may transmit your offered message

Standby Wait until called or Wait for reply

Standing By Used by control to indicate Control is ready to receive messages

Wait Please wait for further instructions

Wait Out Wait until channel is clear

Wilco I will comply

RALLY TERMINOLOGY

Stage Commander In charge of Stage usually at the Start.

Deputy Commander Second in command of Stage usually at the Finish. Where the cars are supposed to stop for the Marshals.

Flying Finish Where the cars are timed at rally speed at the end of the Stage.

Stage Stopped Temporary halt to rally competitors entering Stage. **Stage Closed** Stage shut down. Do not announce this in error.

Opening Car

Closing Car

Mull: Re-opens Stage at end of Rally. (Other: Makes Stage active.)

Mull: Closes roads to start Rally. (Other: Completion of Stage.)

Rescue

Medical facilities (Ambulance/Paramedics) to assist casualties.

Recovery Vehicles equipped to recover cars off stage.

Red Flag Shown to competitors indicating that an obstruction may be ahead.

Out of Sequence Use this rather than 'Missing' or 'Lost' (its Mull not Bermuda Triangle)

Car Off You must have definite information (Location, OK, Status)

Car 00 or 0 Car An official vehicle travelling at near competitive speed immediately

before the first competitor to prime Marshals etc

Talkthrough System

During the event the Island will be covered by a series of interlinked Talkthrough units enabling the outstations to remain in contact with control, situated in Rally HQ, at Salen. The system is organised into multiple controlled nets; e.g. North and South. Each net is formed by the use of multiple Talkthroughs, so as you move around the Island you will have to change frequencies. At Times, if traffic is light, the nets may be linked together to form one large network.

All operators should have a specially printed, colour map showing the road coverage. Each colour on the map represents a frequency and has been given a channel number from one to ten. When you reach the island and collect the final information there will be a sheet detailing the frequencies for each channel.

While mobile around the Island it may be useful to get a feel of what you can use and where. When you are at a fixed location, e.g. finish of stage 2, there will be a channel suggested on the operator schedule, which may not be the obvious choice based on the road coverage map.

Do not use personal Talkthroughs unless instructed to do so by engineering. The Group will not authorise any unnecessary operation on its Talkthrough permit and any operation will be illegal. If communications don't work, talk to the engineering team on Friday afternoon.

Technical Notes

The rally is an extended event that lasts for several days, your equipment will consume large amounts of battery power even when only in receive. Ensure you have sufficient battery power available for the event.

Even with the extensive Talkthrough network, you will require an efficient antenna system on your vehicle; we recommend a 5/8th antenna for 2m or equivalent as a reasonable standard.

Most stage coverage is on 2m although there are some areas where you may be advised to use a 70cm frequency.

In the event of a failure in the Talkthrough system and loss of communications with control an effort should be made to establish communication with the other stations on your stage. The main aim would be to have Start to Finish communications wherever possible, using intermediate stations as relays if necessary. If one station on your stage can contact control by an alternative route please take advice from control as to the action to take. In some cases control may still be able to hear your traffic so please keep airtime to the minimum required for stage operations. It may be advisable to stay on your normal net frequency in the event that communications with control can be re-established

Helping out before and after

Anyone can lend a hand by helping to install or take down the facilities around the Island. It will let people get a feel for what the event is all about and let you meet the others involved. Contact Control if you want to assist.

This is particularly important after the event. We need your assistance to avoid a few individuals still dismantling some of the network on the Tuesday following the event. Engineering tests for next year's event are carried out following the close of the rally. If you wish to assist, contact Adrian GM1FML or control.

Getting about the Island

A Motoring Overview

This is an overview, of Mull, the Island. Written to assist newcomers and seasoned veterans to make the best of their stay, and at the same time, to ensure that the locals are not upset by our actions.

Roads:

A large percentage of the roads on Mull are single track with passing places.

It is essential that you understand and observe the following rules.

Rule 1.

If you are being followed by another vehicle, which is showing obvious signs that it is in a hurry or wishes to travel faster than your vehicle, pull in at the next available passing place and let it pass.

Rule 2.

Never cross to the offside passing place to allow through passage of other cars, unless under extreme circumstances, i.e. when stopped to allow a large vehicle to negotiate the passage, but even in this case only once all other traffic has stopped.

Rule 3.

If you are on a hilly section, and this describes most of the Island, remember to give way to vehicles coming up hill, if at all possible. This makes sense if you think of the mechanical side of things. It can be very difficult for vehicles, especially those heavily laden, to restart from rest on a hill. The obvious test; would you expect others to make way for you if you were in the same circumstances?

Rule 4.

Always travel at a speed at which you can safely pull up. **REMEMBER** there is nowhere to go bar the ditch on a single-track road, and ditches cause damage. There are not many facilities for repair to cars, and even fewer for repair to people. **SPEED** kills, keep your speed down.

Rule 5.

When travelling at night, don't rely too heavily on your headlights. There will be obstacles on the roads, such as sheep and cattle, which will not show up until the last minute, or may wander into your path at will.

Rule 6.

In the days leading to the start of the rally and once it has begun, take extra precaution with regard to your speed. **REMEMBER** it's rally drivers you will be dealing with, people who are used to driving at breakneck speeds on these and every other kind of roads, but may not understand the above rules and limitations of single track roads.

Always put into practise the following maxim:

Maxim 1

Oncoming visible traffic has priority, I must safely allow them passage, I must not be discourteous, I must pull in, or if need be reverse back to the last passing place, with special reference to Rule 3.

Maxim 2

Once you have stopped in a passing place to allow safe passage of another vehicle, whether oncoming or following, be courteous, wave to them as they pass. **CIVILITY** wins friends, and costs nothing. Be wary of flashing headlights, just because an oncoming vehicle has flashed it's lights doesn't mean that it is safe to proceed, although generally it does, be WARY it might NOT.

Mull driving is an experience, it is not all bad, but if you put all of the above, and a good dose of common sense, into your island driving both you and all other road users, locals, rally types and tourists, will get benefit from the experience.

FUEL stations are few and far between on the island, make sure you maintain your fuel tank at over half full all the time you are on the island, that way you will never run short, or out of fuel. **REMEMBER** you may have to push your vehicle to a safe place, prior to leaving it to search for more fuel.

Fuel stations are at the following locations:

- 1) MacKay's Garage, Tobermory (Beside new car park, near the Tobermory Distillery).
- 2) The other end of the main street, near the main pier, in Tobermory.
- 3) Salen, Isle of Mull, on the road, which crosses the island from East to West.
- 4) Craignure, opposite the main ferry terminal.
- 5) Craignure, about 1/2 a mile south of the main ferry terminal.
- 6) Various locations in the Ross of Mull.

Control Operations

Control operators are involved to a level of physical, mental and psychological tensions not normally experienced by out-station operators. This is a combination of handling a possible continuous stream of required information, from start to finish of the event, using minimum radio traffic. It is also not helped by being scrutinised during operation.

Good control procedure should minimise the quantity of radio traffic while ensuring quality use of airtime. High skill levels of message handling, recording, logging and distribution are required.

Organisers

Close relationship with the organisers has shown that we can work well together and 'are part of the same Team.' Involve your organiser and 'look' to him for the 'nod' indicating we are nearly working telepathically.

The developing involvement with the organisers has promoted Control to be the information centre, reduced radio traffic and significantly improved efficiency to the degree that 'Control is the place where you get the best picture.'

Tiredness

Tiredness is a major problem. You are on for many hours, unlike outstations, and should learn to pace yourself. Poor operation is to hold onto the mic 'until you fall over sideways.' Better if you swap, have a break, log for someone, have something to eat and then return. Pacing yourself is preferable to being 'ASKED' if you would like a break. The log sheets become less literate as time goes on which suggests that voice communications similarly deteriorate. This we must work together to improve.

Use of Personnel

Using operators 'resident' near control for the early and late periods of each day/night both improves the involvement of the operator and assists others to have 'an extra hour' before arriving.

Consideration should be given to requirements to eat, sleep and enjoy other pursuits.

Out stations meet a variety of people and see cars etc. Control operators won't see anything of what goes on out there.

Logging and Message Forms

The terminology used in filling in these forms should be formal. (It would be helpful if everyone wrote legibly.) Message times are important especially if an incident is developing. We must not let logging standards slip because of tiredness or familiarity.

Police

Working with the police is extremely important. The police record all information and can summon emergency services if required. If you hear something pertinent to the police inform them, they will do the same. This is part of the overall picture of the event.

Control Board

The Event as no other individual sees it. This MUST be kept up to date. The Control Board 'ticker' needs to know if you have received an update. Keeping everything up to date may get you brownie points.

Information for other nets

Always be aware that a message you receive which is mundane may be the info required on one of the other nets. Recovery, Service, Opening car, Safety officer, Engineering or Raynet operators may just be interested.

Control Procedures

Stage Opening

30 minutes before a stage goes live make a role-call of all operators on stage.

Routine Information

The APRS system is now monitoring the position of several of the course vehicles but remember to announce to the net that the stage is live when high speed cars enter the stage. Some information still requires to be passed by Voice and logged at control. The actual rally times of car 00 and the in and out times of the 1st competitor should be logged together with the numbers of the last three cars out of the stage and the total number of cars in and out of the stage. This information should be passed to the next stage letting them know who to expect.

Stage closing

Record all cars reported as off on a stage on the **Cars Off sheet**. This sheet is also carried by the Opening Car and by Recovery.

When the Opening car reaches the stage start they will request the information of cars still in the stage. This they and Recovery will record in the same basic format.

81/86MHz MSA Nets

Routine Information should be received from the 81MHz MSA sub controls via the link stations should be the same as that from a locally controlled stage in previous years. Car 00, First competitor start and finish time, incidents, cars off in stage, total cars in/out and last three cars should be recorded as normal on the control information board. The only information not relayed should be the competitor tracking numbers.

APRS

The APRS system should display the current location of the various tracked officials on the display at your control location. It should therefore be unnecessary to ask these officials for their current position.

Wash down after the event

Traditionally held on the Sunday evening when everybody has had a chance to recover from the Friday/Saturday. The years venue is to be the Salen Hotel. This meeting is a good opportunity to air your views and generate feedback for the organisers.

Other operators who cannot attend are invited to send in comments / feedback in writing to Crawford, GM8HBY. This is an important part of the exercise and all comments, good or bad, will be used to improve next year's event.

Crawford Ross, GM8HBY Strathclyde Raynet Group 16 Glebe Crescent Airdrie ML6 7DH

Tel: 01236 755177

E-mail: gm8hby@strathclyde-raynet.com

Tour of Mull Operators

The Raynet Tour of Mull event has operators from many parts of the country. Most of our personnel return year after year. You may know someone, that we cannot reach, who would like to take part, whether in your Group or elsewhere. This is not a closed event, pass the word around, we will be pleased to have their assistance (and cause them sleepless nights).

Some of the Raynet Groups involved:

Strathclyde
East Dumbartonshire
Leicestershire
Greater Manchester
Dundee
Fife
Argyll
Cheshire
Four Counties
Perth & Kinross
Southport & District
Lothian

Remember to keep us informed of any change of contact details if you want to be kept informed of future events.

Mull 2005 - Operator Positions See Safety Manual for Maps etc

Friday Night Start Tobe		ermory 20:00 Grid		MSA Ctrl	Controller		Channel
Mishnish Lochs 1	Stage 1	20:11					
	Start1	GM7MTK	4980 5510				
	Finish1	GM4SGB	4327 5203				
	Link1	GM8KCQ	4650 5240	Tartan Control	Stan Thorogood	MM3SXT	Red
Hill / Tuath	Stage 2	20:29					
	Start2	GM6FPX	4291 5079				
	Finish2	GM6AJS	3570 4128				
	Link2	GM8KWQ	3710 4680	Tob Control	John Clayton		MSA 81
				Tob Link	Neil McHaffie		MSA 81
Ardtun 1	Stage 3	23:02					
	Start3/4	GM1MMK	3847 2193				
	Finish3/4	GM0SUY	4041 2306				
	Link3/4	GM7GNK	3930 2320	Silk Control	Derek Machin		Blue
Ardtun 2	Stage 4	23:12	As S4				
Loch Scridain 1	Stage 5	23:45					
	Start5	GM4COX	5449 2924				
	Finish5	GM4VAY	4863 2957	_			
	Link5	TBA	5330 2830	Atlas Control	Ben McCosh	MM0MSH	MSA 81
Gribun 1	Stage 6	23:59					
	Start6	GM4RQK	4546 3289				
	Finish6	GM6CKR	5428 3897				
	Link6	MM1EXO	4650 3960	Swift Control	Simon Goodwin		Red
Calgary Bay 1	Stage 7	00:38					
	Start7	MM0ABS	4093 4561				
	Finish7	GM8XNQ	4280 5109	_			
	Link7	GM7MTK	3710 4680	Mull Control	John Bell	GM0JMO	MSA 81
				Tob Link	Neil McHaffie		MSA 81

Saturday Afternoon

Tuath	Stage 8	12:10					
	Start8	GM6AJS	5460 4070				
	Finish8	MM1EXO	4126 4487				
	Link8	GM7GNK	4890 3970	Tob Control	John Clayton		Red
Hill Road 1	Stage 9	12:27					
	Start9	GM8KWQ	4160 4560				
	Finish9	GM8KCQ	4287 5102				
	Link9	GM4SGB	3710 4680	Tartan Link	Diana Baines	MM0CMX	Blue
Calgary Bay 2	Stage 10	12:37					
	Start10	GM0SUY	4268 5114				
	Finish10	MM0ABS	4100 4550				
	Link10	GM4SGB	3710 4680	Mull Control	John Bell	GM0JMO	MSA 81
Hill Road 2	Stage 11	12:54					
	As S9						
Mishnish Lochs 2	Stage 12	13:16					
	Start12	GM7MTK	4327 5203				
	Finish12	GM8XNQ	4967 5494				
	Link12	GM0GIB	4650 5240	Tartan Control	Stan Thorogood	MM3SXT	Red
Loch Na Keal	Stage 13	14:18					
	Start13	GM6CKR	5256 3786				
	Finish13	GM4RQK	4560 3269				
	Link13	MM0BJP	4650 3960	Rede Control	Ian Dixon		Blue
Loch Scridain 2	Stage 14	14:35					
	Start14	GM4COX	4873 2938				
	Finish14	GM4VAY	5254 2920				
	Link14	GM1MMK	5330 2830	Swift Control	Simon Goodwin		MSA 81

Saturday Evening	Start Sale	n 21:00					
Loch Tuath/Calgary	Stage 15 Start15 Finish15	21:10 GM6AJS GM1SRP	5385 4124 4280 5109				
	Link15	MM1EXO	3710 4680	Tob Control	John Clayton		MSA 81
Mishnish Lochs 3	Stage 16 Start16 Finish16	21:42 GM7MTK GM8XNQ	4327 5203 4967 5494	Tob Link	Neil McHaffie		MSA 81
Look Coridoin 2	Link16	GM8KCQ	4650 5240	Tartan Control	Stan Thorogood	MM3SXT	Red
Loch Scridain 3	Stage 17 Start17 Finish17	00:06 GM4VAY GM4COX	5449 2924 4863 2957	0.10.4.1	0: 0 1:		D.
Gribun 2	Link17 Stage 18 Start18 Finish18	GM1MMK 00:21 GM4RQK GM0SUY	5330 2830 4546 3289 5428 3897	Swift Control	Simon Goodwin		Blue
Hill Rd / Glen Bellart	Link18 Stage 19 Start19	GM7GNK 01:00 GM6CKR	4650 3960 4179 4579	Silk Control	Derek Machin		Red
	Finish19 Link19	GM6FPX MM0ABS	5530 4499 3710 4680	Mull Control Mull Link	John/Diana Dave Duff	JMO/CMX GM4UGF	MSA 81 MSA 81

MSA 81 = 81.5750 Red = 86.3750 Blue = 86.3625

Mull 2005 - Operator Locations Summary

CallSign	Name	Fri	Sat 1	Sat 2
GM0GIB	Martin Gibb	Ctrl	L12	Ctrl
GM0SUY	Colin Auld	F3/4	S8	F18
GM1MMK	Kenneth Cupples	S3/4	L14	L17
GM1SRP	John McCulloch	Ctrl	Ctrl	F15
GM4COX	Jack Hood	S5	S14	S17
GM4RQK	Andrew Johnson	S6	F13	S18
GM4SGB	Susan Beech	F1	L9	Ctrl
GM4VAY	Allan Newlands	F5	F14	F17
GM6AJS	Andrew Sharp	F2	S8	S15
GM6CKR	Roger Beever	F2	S13	S19
GM6FPX	Stephen Hill	S2	Ctrl	F19
GM7GNK	John Taylor	L3/4	L8	L18
GM7MTK	Julian Gibson	S1/L7	S12	S16
GM7SWX	Denis Curran	Ctrl	Ctrl	Ctrl
GM8HBY	Crawford Ross	Ctrl	Ctrl	Ctrl
GM8KCQ	lain Stevenson	L1	F9	L16
GM8KWQ	Azeem Din	L2	S9	Ctrl
GM8TT	Rik McHarg	Ctrl	Ctrl	Ctrl
GM8XNQ	Max Wahid	F7	S12	S16
MM0ABS	Alan Foster	S7	F10	L19
MM0BJP	Alan McDermid	N/A	L13	N/A
MM1EXO	Sandra Andrews	L6	F8	L15