



SESSION 11.1

Data Entry Checks

First TUFMAN Training Workshop (TTW-1)
3-7 December 2012
SPC, Noumea, New Caledonia



Presentation outline



- What types of data entry errors can occur?
- Trapping data entry errors
- Some data entry checks in TUFMAN
- The species range table in TUFMAN
- The 'limits' table in TUFMAN
- Logsheet check totals
- Vessel trip track plot

What types of data entry errors can occur



There are many ways data can be entered incorrectly, e.g.:

- Transposition errors:
 - Same characters, e.g. 112 entered as 121
- Transcription errors:
 - Not entered the same as on the form, e.g. 112 entered as 122.
- Data not entered, e.g. May have skipped entry of a set or species catch
- Duplicate data – data entered more than once
- Recording errors – so the values on the original form are wrong
- Formatting errors – e.g. Dates, 10/11/12 means something different in US vs non-US countries

Trapping data entry errors



- Restrict to a range of values where possible, for example:
 - Catch in numbers will never be negative, and should not exceed a maximum value
 - Dates may not be allowable in the future (e.g. logsheet sets)
 - Set dates should be within the departure and return dates of a trip
 - Average weight of a single fish could be limited with a minimum and maximum
- Only allow certain characters to be entered if possible – e.g. if a number is being entered then you should only be allowed to enter a number, not letters.
- Remove ambiguity by using formatting – e.g. dates are formatted to '10-Nov-2012' format, so if you enter as 10/11/12 you can see that the date has been interpreted correctly
- Use format 'masks' if possible - for example the entry of positions are restricted to strict entry formats for the lat and lon.
- Use other data to verify what has been entered, e.g. the previous set, other dates (e.g. first logdate must be between departure and return dates)

Some entry checks in TUFMAN



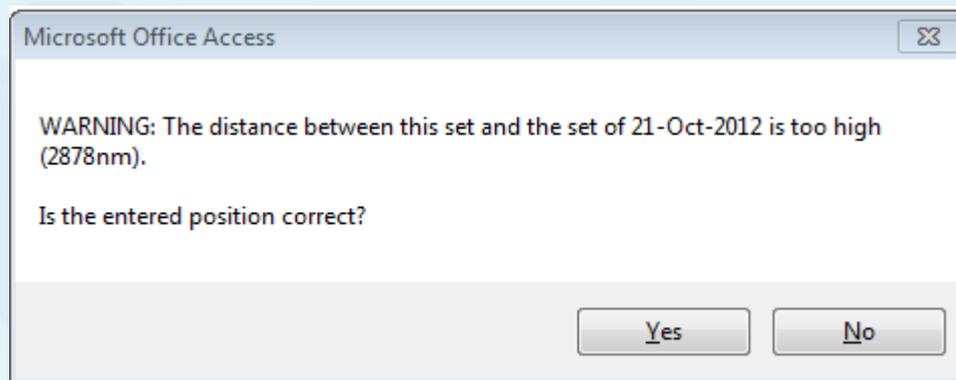
Logsheet data checks

- Trips
 - Dates in proper order (e.g. `depart_date < return_date` etc.)
 - Dates don't overlap with another trip for the vessel
 - Departure date to first logsheet date check, should be less than a certain value
 - Last log date to return date check, should be less than a certain value
 - Trip Length check

Some entry checks in TUFMAN



- Logsheet Sets
 - Set dates within trip dates
 - No overlap with another set within a certain time period (gear dependent)
 - Set distance limits check (distance between 2 sets should not exceed a certain speed that it would take to travel that far within the time between the 2 sets). Will give a warning if it is too high but allow the data to be saved.
 - Number of hooks limit check
 - Hooks between float limits check
 - Time <24 hours, minutes < 60 (e.g. 25:65 not allowed)
 - Latitude > 90 not allowed, minutes must be < 60 (e.g. 9100N, 7961W not allowed)
 - Longitude > 180 not allowed, minutes must be < 60 (e.g. 18100W, 17961W not allowed)



Some entry checks in TUFMAN



- Logsheet catch
 - Species range checks – Numbers and weights of fish by species less than a defined limit for that species
 - average weights, catch by weights checks – must be within pre-defined limits for the species
 - Only 1 row per species per set



A record for this species already exists for this set. Enter only 1 record for each species.

Some entry checks in TUFMAN



Licensing

- License start date must be within the dates of the agreement reporting period
- License dates mustn't overlap with another license for the same vessel
- License number should be unique

Vessel details:

- IRCS must not contain non-alphanumeric characters
- Vessel name should be unique
- Registration number should be unique

TITLE



- Heading
 - Etc (look at TDW-6 presentations)

The Species Range Table



- For range checking of numbers and weights of species

Species ranges for selected gear

Select Gear Type

Sort by

Species code	Species Name	Min No	Max No	Min Wt	Max Wt	Min Av Wt	Max Av Wt	Min Len	Max Len
ALB	ALBACORE	0	2500	4	6500	1	80	20	136
BAR	BARRACUDAS	0	30	0	100	0	0	20	200
BET	BIGEYE	0	300	5	4500	2	500	20	500
BFT	NORTHERN BLUEFIN	0	20	10	250	20	250	40	300
BIL	MARLINS, SAILFISHES, SPEARFISHES (UNIDENTIF	0	20	0	200	10	300	50	400
BLM	BLACK MARLIN	0	30	10	600	9	300	50	400

- Min No** –the minimum number of fish allowed in a set
- Max No** - the maximum number of fish allowed in a set
- Min Wt** –the minimum weight of fish (kg) allowed in a set
- Max Wt** - the maximum weight of fish (kg) allowed in a set
- Min Av Wt** –the minimum average weight of fish (kg) allowed in a set. Average weight is calculated by dividing catch in weight by catch in numbers
- Max Av Wt** - the maximum average weight of fish (kg) allowed in a set
- Min Len** – The minimum length (cm) for port sampling
- Max Len** – The maximum length (cm) for port sampling

The Species Range Table



- Used during logsheet and port sampling data entry



Entered weight should be lower than 6500 for ALB



Estimated average weight should be lower than 80 for ALB

- Values 'local' to your country and can be changed
- Table is editable in TUFMAN but take care changing it
- The species in the list is a small list, but others can be added, and other gears can be added

The Limits Table



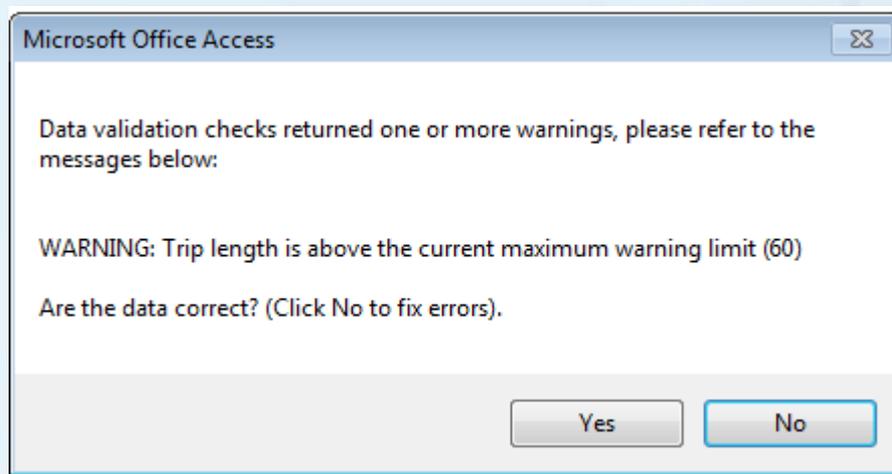
- Used to contain range values to check a number of types of data

gear	Variable	Descriptor	Min_Error	Min_Warning	Max_Warning	Max_Error
L	hooks_n	Number of hooks	150			6000
L	Hooks_Btn_floats	Hooks between floats	4	0	0	50
L	Trip_Length	Trip length	0	0	60	360
L	Depart_to_Log	Number of days between departure and first log date	0	0	3	40
L	Log_to_Return	Number of days between the last log date and return to port	0	0	3	40
L	Settime	Number of hours between sets	0	15	0	0
L	SetDistance	Distance between consecutive sets	0	0	0	250
S	Trip_Length	Trip length	0	0	365	0
S	Depart_to_Log	Number of days between departure and first log date	0	0	3	0
S	Log_to_Return	Number of days between the last log date and return to port	0	0	3	0
S	Settime	Number of hours between sets	0	0	0	0
S	SetDistance	Distance between consecutive sets	0	0	0	360
S	Return_to_Sample	Number of days between return date to sample date	0	0	7	0
S	Hours_Samp	Number of hours taken to sample the fish	0	0	0	140

The Limits Table



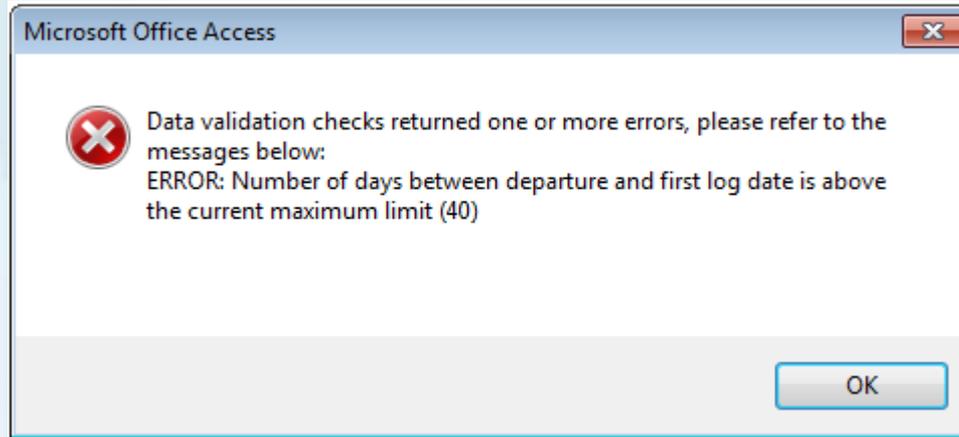
- TUFMAN checks this table and compares the entered value to the min and max warning and error values, e.g.
 - Trip length > 60 but less than 360



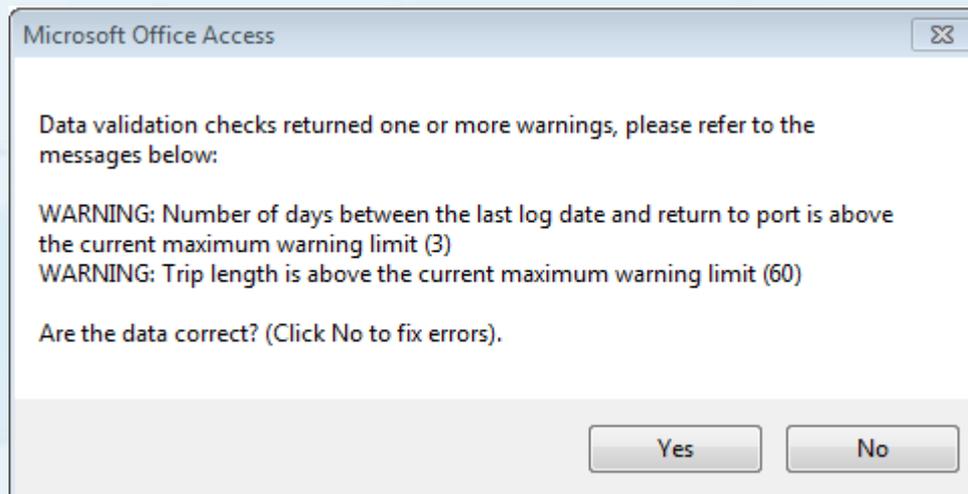
The Limits Table



- First logdate > 40 days after date of departure (error so must change the values)



- A combination of 2 warnings:



The Limits Table



- Max and min warning and error values derived from regional database
- Error limits represent values almost never seen
- Warning values are valid but not common
- Set by SPC, same for all users of TUFMAN
- Can be changed if required
- Future versions of this table will be by fleet (e.g. Country and flag), not just by gear

Logsheet Check Totals



- Checked immediately after logsheet entry, or change in catch
- Excellent method of checking correct entry of numbers
- Total of each species column is verified

SOUTH PACIFIC REGIONAL LONGLINE LOGSHEET

PAGE 10 OF 10

VESSEL NAME Chooch		FISHERY PERMIT OR LICENCE NUMBER(S) 004		YEAR 2005	
OFFICIAL REGISTER NUMBER 000014		NAME OF AGENT IN PORT OF UNLOADING NFI		PORT OF DEPARTURE Alga	
DATE OF DEPARTURE 16/10/05		DATE AND TIME OF DEPARTURE 16/10/05 0430		DATE AND TIME OF ARRIVAL IN PORT 16/10/05 0530	
VESSEL TYPE NZ		INTERNATIONAL REGISTRATION CALL SIGN ZM 5963		PRIMARY TARGET SPECIES Yel-A-	
VESSEL HOME PORT NZ 1031		INTERNATIONAL REGISTRATION CALL SIGN ZM 5963		NUMBER OF HOOKS BETWEEN FLOATS 35	

• ALL DATES AND TIMES MUST BE UTC / GMT
• ALL WEIGHTS MUST BE KILOGRAMS

TIME	LATITUDE	LONGITUDE	SET NUMBER	ALBACORE		BIGEYE		YELLOWFIN		WAHOO		SHARK		STRIPED MARLIN		BLUE MARLIN		BLACK MARLIN		SWORDFISH		OTHER SPECIES			
				No	KG	No	KG	No	KG	No	KG	No	KG	No	KG	No	KG	No	KG	No	KG	No	KG	NAME	No
0712	2 18 57 S	170 13 W	0720 1000	21	300			4	70							1	40					SAC/MAH	13	78	
0713	2 19 00 S	170 13 W	0730 1000	10	150			2	35													SAC/MAH	5	40	
0714	2 19 00 S	170 11 W	0800 1000	7	100	3	70	3	70	1	6	2										SAC/MAH	8	50	
0715	2 18 55 S	170 11 W	0830 1000	14	200	5	170	3	90	2	12	1										ERIC/SHAN	5	25	
PAGE TOTAL				52	750	8	220	12	265	3	18	3				1	40						SAC/MAH	31	193
TRIP TOTAL				52	750	8	220	12	265	3	18	3				1	40						ERIC/SHAN	31	193

Logsheet Check Totals



Check Trip Totals

Total trip catch totals

(EEZ Catch only mode ?)

	Number	Weight
ALBACORE	0	0
BIGEYE	14	520
YELLOWFIN	7	150
SKIPJACK	0	0
SHARK	0	0
STRIPED MARLIN	0	0
BLUE MARLIN	1	30
BLACK MARLIN	0	0
SWORDFISH	0	0
SAILFISH	0	0
S-B SPEARFISH	0	0
MOONFISH/OPAH	0	0
OILFISH	0	0
MAHI MAHI	0	0
WAHOO	0	0
OTHER SPECIES	0	0

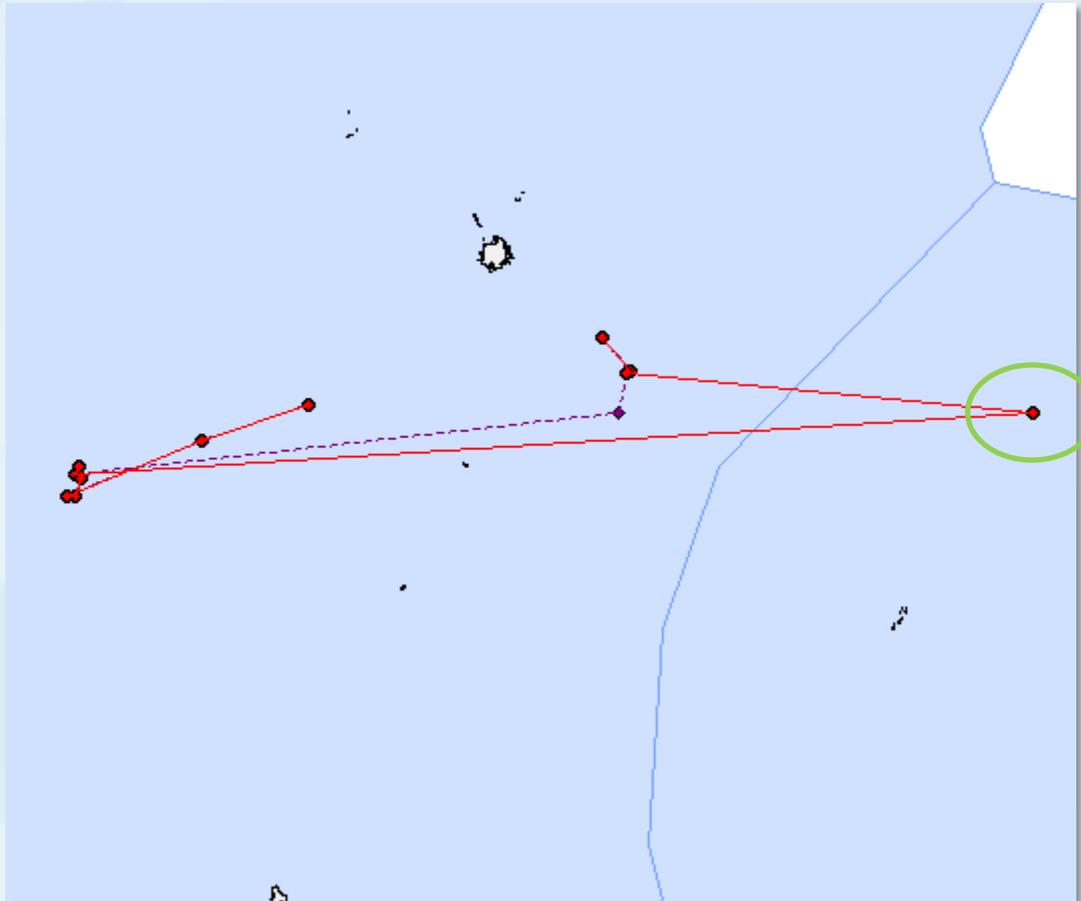
Reset values Return to Trip entry Save TOTALS and Exit

Admin password

Vessel Trip Track Plot



- Old feature but now available from logsheet details, and logsheet summary forms.
- Can visually verify positions immediately after logsheet entry



Vessel Trip Track Plot



Vessel	Batch	Year From	To	Records entered today	Apply filter	Reset Filter
Licensed All	Nat. fleet All	2011		<input type="checkbox"/>		

Longline trip summary										
Vessel name	Departure date	Start date	End date	Return date	Departure Port	Return Port	Lic link	Nat fit link	Batch	Checked
JUI DER 36	01-Sep-12	01-Sep-12	20-Sep-12	21-Sep-12	AT SEA	SUVA	No	Yes		Chk
JUI DER 36	01-Aug-12	01-Aug-12	31-Aug-12	31-Aug-12	AT SEA	AT SEA	No	Yes		Chk
MERCURY	13-Jul-12	14-Jul-12	30-Sep-12	30-Sep-12	KAOHSIUNG	AT SEA	No	Yes		Chk
JUI DER 36	01-Jul-12	01-Jul-12	31-Jul-12	31-Jul-12	AT SEA	AT SEA	No	Yes		Chk
JUI DER 36	01-Jun-12	01-Jun-12	30-Jun-12	30-Jun-12	AT SEA	AT SEA	No	Yes		Chk
SHUN MENG	01-Jun-12	01-Jun-12	30-Jun-12	30-Jun-12	AT SEA	AT SEA	No	Yes		Not Chk
YUH CHANG 16	01-Jun-12	01-Jun-12	30-Jun-12	30-Jun-12	AT SEA	AT SEA	No	No		Chk
LONG BOW 7	31-May-12	31-May-12	30-Jun-12	30-Jun-12	PAGO PAGO	AT SEA	No	Yes		Not Chk
SHIN JAAN SHIN NO. 168	20-May-12	20-May-12	31-Jul-12	31-Jul-12	PAGO PAGO	AT SEA	No	No		Not Chk
LONGBOW 1	04-May-12	05-May-12	30-Jun-12	30-Jun-12	PAGO PAGO	Unknown	No	Yes		Not Chk
SUNG HUI	05-May-12	05-May-12	25-May-12	25-May-12	AT SEA	AT SEA	No	Yes		Not Chk
HENG HONG 168	02-May-12	02-May-12	31-May-12	31-May-12	AT SEA	AT SEA	No	Yes		Chk
JUI DER 36	01-May-12	01-May-12	31-May-12	31-May-12	AT SEA	AT SEA	No	Yes		Chk
MERCURY	01-May-12	01-May-12	12-Jul-12	12-Jul-12	KAOHSIUNG	KAOHSIUNG	No	Yes		Chk
SHUN MENG	01-May-12	01-May-12	31-May-12	31-May-12	AT SEA	AT SEA	No	Yes		Chk
YUH CHANG 16	01-May-12	01-May-12	31-May-12	31-May-12	AT SEA	AT SEA	No	Yes		Chk
EMELEE 2	18-Apr-12	19-Apr-12	03-May-12	04-May-12	PORT	PORT				
EMELEE 3	18-Apr-12	19-Apr-12	03-May-12	04-May-12	PORT	PORT				
YUH CHANG 16	14-Apr-12	15-Apr-12	30-Apr-12	30-Apr-12	PAGO	PAGO				
SUNG HUI	14-Apr-12	14-Apr-12	04-May-12	04-May-12	AT SEA	AT SEA				
EMELEE 2	05-Apr-12	06-Apr-12	16-Apr-12	17-Apr-12	PORT	PORT				
EMELEE 3	05-Apr-12	06-Apr-12	16-Apr-12	17-Apr-12	PORT	PORT				
JUI DER 36	01-Apr-12	01-Apr-12	30-Apr-12	30-Apr-12	AT SEA	AT SEA				
YUH CHANG 16	01-Apr-12	01-Apr-12	08-Apr-12	09-Apr-12	AT SEA	AT SEA				
KIN SHUN AN 6	22-Mar-12	23-Mar-12	19-May-12	19-May-12	KAOH	KAOH				
EMELEE 2	14-Mar-12	15-Mar-12	31-Mar-12	01-Apr-12	PORT	PORT				

SPC / FFA REGIONAL LONGLINE LOGSHEET			
Batch id.			
Vessel name	Permit / license number(s)	Trip No	Company (from linked license)
JUI DER 36		0	
Gear	FFA VID	Primary target species	Date of departure
Longline		ALBACORE	01-Sep-2012
Country of Registration	Port of departure	Return date	21-Sep-2012
Vanuatu	AT SEA	First day on logsheet	Last day on logsheet
Registration Number	IRCS	01-Sep-2012	20-Sep-2012
1525	YJUB3	SUVA	

Links to other Data			
license			
Unloadings match			
Vess Activity match	0		
National Fleet match			

Delete Trip **Trip Track Map**

ALL DATES & TIMES MUST BE UTC / GMT

Daily Log										
Log date	Activity code	Latitude	Longitude	Set time	Hooks	Hks btw Fit	EEZ			
01-Sep-12	2	0603S	16920E			0	IW	International waters		
02-Sep-12	1	0613S	16935E	5:00	3800	0	IW	International waters		
03-Sep-12	1	0613S	16908E	5:00	3800	0	IW	International waters		
04-Sep-12	1	0612S	16902E	5:00	3800	0	IW	International waters		
05-Sep-12	1	0612S	16901E	5:00	3800	0	IW	International waters		
06-Sep-12	1	0614S	16907E	5:00	3800	0	IW	International waters		
07-Sep-12	1	0559S	16902E	5:00	3800	0	IW	International waters		
08-Sep-12	1	0558S	16900E	5:00	3800	0	IW	International waters		
09-Sep-12	1	0558S	16856E	5:00	3800	0	IW	International waters		
10-Sep-12	1	0559S	16853E	5:00	3800	0	IW	International waters		
11-Sep-12	1	0538S	16848E	5:00	3800	0	IW	International waters		
12-Sep-12	1	0516S	16844E	5:00	3800	0	IW	International waters		
13-Sep-12	1	0540S	16829E	5:00	3800	0	IW	International waters		
14-Sep-12	1	0538S	16830E	5:00	3800	0	IW	International waters		
15-Sep-12	1	0540S	16831E	5:00	3800	0	IW	International waters		
16-Sep-12	1	0543S	16839E	5:00	3800	0	IW	International waters		
17-Sep-12	1	0546S	16849E	5:00	3800	0	IW	International waters		
18-Sep-12	1	0519S	16909E	5:00	3800	0	IW	International waters		
19-Sep-12	1	0530S	16918E	5:00	3800	0	IW	International waters		
20-Sep-12	1	0544S	16918E	5:00	3800	0	IW	International waters		

ALL WEIGHTS MUST BE IN KILOGRAMS

Species Catch (I. to go to new Daily Log)			
Species	No RET	Kg RET	No DISC
	0	0	0

F1-YFT F2-BET F3-ALB F4-SKG F5-RRU
 F6-POL F7-MLS F8-SFA F9-FAL F10-MSD

Record Entered By: OWNER Entry Date: 13-Nov-2012 11:25 AM **Trip Track Map** Save and Exit Cancel



END