NDB LIST CLE No. 131 420 - 439.9 kHz 28 - 31 May 2010, midday-midday local time

COMBINED RESULTS
EUROPE

For overall statistics, please see the covering email.

Reporters:

CZE	**fr**	Frantisek Müller, Praha
CZE	**jp**	Jiri Prokop (via Zdenek), Alsovice, near Jablonec nad Nisou
CZE	**jv**	Jaroslav Tomek, Ostrava
CZE	**my**	Milos Holy, Lhota pod Radcem
CZE	**ze**	Zdenek Elias, Jablonec nad Nisou, N. Bohemia
DEU	**db**	Dietmar Birkhahn, Lindlar, 30km east of Cologne
DEU	**hw**	Hartmut Wolff, Near Wolfsburg
DEU	**je**	Joachim Rabe, Norderstedt, north of Hamburg
DEU	**mo**	Michael Oexner, Roschbach
DEU	**mz**	Matthias Zwoch, Arnsdorf, Nr.Dresden
ENG	**ag**	Alan Gale, Whitworth, Lancashire
ENG	**bk**	Brian Keyte, Bookham, Surrey
ENG	**ds**	David Atkins, Abbots Langley
ENG	**hh**	Brian Heath, Stapleton, Leicestershire
ENG	**me**	Mike Thayne, Whitley Bay
ENG	**px**	Peter Greatorex, Bolsover, Derbyshire
ENG	**py**	Peter Conway, Hastings
FIN	**jt**	Jarno Fält, Tampere
FRA	**bx**	Bertrand, Villiers Sur Morin, near Paris
FRA	**jj**	Jean Jacquemin, Bethune, Merville, near Lille
HOL	**rb**	Roelof Bakker, Middelburg, Zealand
IRL	**fo**	Finbar O'Connor, Malin Head (Trawbreaga Bay)

For full details, please see the individual reporters' logs,
as previously posted by them to the List.
If you spot an omission or problem in your own details below
please let me know (ndbcle'at'gmail.com
- replace the 'at' by an @ symbol)

BEACONS HEARD:

Beacons are shown in kHz order within each country
UNIDs and Offshore NDBs appear at the end of the list.
The numbers shown within the table are the times in 'hh' UTC that the beacons were logged.
(e.g. 22 indicates logged between 22:00-22:59).

Cou	kHz	Call	Location	CZE fr	CZE jp	CZE jv	CZE my	CZE ze	DEU db	DEU hw	DEU je	DEU mo	DEU mz	ENG ag	ENG bk	ENG ds	ENG hh	ENG me	ENG px	ENG py	FIN jt	FRA bx	FRA jj	HOL rb	IRL fo
ALG	423	BJA	Bejaia Soummam							22			0							21		0		2	
ALG	424	GRS	Ghriss																					2	
AUT	420	INN	Innsbruck	23	0	22	18	20	0	19	22	22	0		23	1	1		21	21		22	1	23	
AUT	426	GBG	Gleichenberg for Graz	23	22	19		20	0	21	20	22	0		20	2	22		22	22	0	22	23	19	22
AZR	420	PI	Pico Is.																	4					
AZR	428	GC	Santa Cruz de Gracios																	4					
BIH	425	DNC	Mostar	23	22	21	22	21		22	23		0							1		22	2	23	
CYP	432	LCA	Larnaca							1															
CYP	435	GKE	Gazimagosa Intl							0															
CZE	422	UR	Hradec Kralove	23	21	19	17	20	0	15	22	22	0	0	22	22	0	21	23	21	23	22	0	20	22
CZE	429	B	Brno Turany Borek	0	20	19	19	22		15	22	22	0							1		22	2		
CZE	429	D	Praha Dejvice	23	22	19	19	20		15		22	0			0				22		22		23	
CZE	432	PK	Pardubice Prvek	0	23	18	19	20		21	20	22	0		22			23	23	22		21	2	22	
CZE	434	KNE	Kunovice	0		18	22	20		21	20	22	0							23		2		1	
CZE	438	K	Praha Kbely	0	23		16	20		21			22							23		1		23	
DEU	425	ERT	Erfurt	23		21	0	20	0	15	20	22	0	0	20	23	0	23	23	21		22	20	23	22
DEU	426	MIQ	Mike for Ingolstadt	23	21		23	20	2	0	20	22	0	0			22	23	23	22		1	23	19	
DEU	427	BRU	Braunschweig					22		15	20									23		22		23	
DEU	429	GBL	Giebelstadt										0												
DEU	429	OBI	Oberpfaffenhofen	23				23		22	22	22	0							2		23		22	
DEU	431	KBA	Karlsruhe Baden Bade	0	0			20	0	21		22	0			0			22	22		10		22	23
DEU	432	RO	Rothenburg	23	20		21	20		22	21		0												
DNK	423	FE	Odense Beldringe	0	21			21	0	15	20		0		22	22	0		21	1	23	22	22	10	22
ENG	421	BUR	Burnham	23					1	21	0			19	11	21	18		13	13		10	18		22

ENG	423	CWL	Cranwell						1	0	0			19	11	22	18	23	13	13		0	22	10	22
ENG	426	SH	Shobdon							0	0			0	11	23	18		13	1		0		10	22
ENG	433.5	HEN	Henton	0						1	0	22		19	11	1	18	0	19	13		21	21	10	22
ESP	420	SPP	Sevilla																	0		2	2	3	
ESP	421	GE	Madrid Getafe						2	22	0		0		22	22	0	21	20	21		1	0	3	
ESP	422	PAM	Pamplona							0					23		0		23	21		21	0	3	23
ESP	423	SCA	Salamanca						2	0					22	23	0		23	21		2	3	3	22
ESP	424	RUS	Reus						0	0			0		23	23	0			23		2	2	3	22
ESP	426	TJA	Madrid Torrejon de Ar						0	0					23		0		23	22		1	3	3	22
ESP	433	JER	Jerez							1					20	0	0			22		2	4	3	22
ESP	433	VON	Vigo							0					22					22			2	3	22
FRA	420	LMT	Auch Lamothe																	3				3	
FRA	423	TS	Toulouse Blagnac							0										2		0	2	3	
FRA	424	LOE	Limoges Bellegarde							0	22				20	23	0		23	18		14	0	2	
FRA	424	PHG	Phalsbourg				0			21												13			
FRA	426	CTS	Castets																	3					
FRA	427	AUB	Aubenas Vals Lanas							1	22				21	2				22		2	23	2	
FRA	427	RY	Royan												12		0			13		10	2	2	22
FRA	428	BST	Lanveoc Poulmic							21	22				11	0	6	23	21	13			2	10	22
FRA	428	CTX	Chateauroux Déols							1	0			0	20	0	0		21	13		10	2	10	
FRA	428	MUS	Nice Cote d'Azur								22	22	0							1					
FRA	430	SN	St. Yan	0	0		23	23	0	1	22	22	0		22	0	0		23	22		10	0	23	
FRA	432	PRD	Peyrehorade												22	0				3		2		2	
FRA	434	MV	Melun Villaroche	0					0	21	22	22	0	0	21	1	0		22	13		10	1	10	22
GEO	430	LU	Batumi		1					22	0							23		0				0	
HNG	420	HM	Budapest Ferihegy	23	20		22	20		20	22	22	0					22		23		22		23	
HNG	430	BUG	Bugac	0	23	19	0	20	2	21	22	22	0					23	23	1		2	2	22	
HNG	436	SME	Sarmellek Balaton	0	23	22		23		22	22	22	0					23		23		22	2	0	
HRV	420	GS	Pula	23			0	20		19	22	22	0		23			21	21	1		22		20	
HRV	421	SAL	Zadar Sali				23	21		20	23		0							23				2	
HRV	422	OSJ	Osijek	23	0	19		21		19	22	22	0			1	0			0		23	2	20	
HRV	424	PIS	Zagreb Pisarovina	23	21	19	20	20	2	19	22	22	0		23	23	0	23	22	23		22	0	23	22
HRV	429	LOS	Losinj	0	22	20	21	20	2	21	20	22	0	0	23	23	0	23	21	22	0	22	2	19	
HRV	433	CRE	Cres	0	0	22	21	20	1	1	22	22	0		23	0		23	22	22		21	1	22	22
HRV	438	KO	Rijeka Krk Kozala	0	23	21		20		19	22	22	2		0	1		0		1		22	0	0	

ITA	421	FN	Roma Fiumicino	22			23	1	0	21	22	22	0				0			22		22	0	23	
ITA	423	FOR	Forli		1			20												23					
ITA	425	MMP	Milano Malpensa				23	22												2		23			
ITA	426	SOR	Sorrento					22		22			0				0			22		23		3	
ITA	427	FER	Ferrara	23			20	22		22	1	22	0			0	0	23	23	22		22	23	22	
LBY	429	KDR	Kadra					22																	
LBY	435	D	Tripoli	0						22			0							23		22		0	
LBY	435	GHT	Ghat	0						23			0							1					
MKD	432	IZD	Ohrid Izdegavlje	0	0	19		0		22	22		0							23		0		1	
MNE	420	GO	Podgorica	23				1		20	22		0							0		23			
POL	423	NT	Lask		1	13	21	21		19	22									0		0		23	22
POL	437	NP	Tomaszow Mazowieck	0	23	20	0	20		22	0		0			1				0		0		23	22
POR	425	EVR	Evora												23		0			22		2	2	2	22
POR	426	CB	Coimbra																	23					
ROU	422	TLC	Tulcea Cataloi	22	1		2	1		0	0		0							22					
ROU	426	BC	Bacau			20		22		20										1					
ROU	428	TGM	Targu Mures	23	23	20	1	22		22	22		0				0	23	23	1		22	2	22	
ROU	434	A	Baneasa East	0						22	22		0							1					
RUS	420	KN	Kobona	22	20	21	1	21		21	22		0							23	22	21		23	
RUS	430	AJ	Staritsa																		22				
RUS	434	GR	Gorka	0						22											21				
RUS	435	ER	Yegorlykskaya	0						0															
RUS	437	DE	Moskva Domodedovo							22															
RUS	437	DW	Moskva Domodedovo							23															
SCT	431	SAY	Stornoway	0						1	23			0	22	0	0	23	0	23		2	0	23	
SRB	420	BT	Batajnica					22																	
SRB	423	ZO	Nis Zitorada	22	23	19	1	20		19	23	22	0		23	22	0	22		21		22	0	20	22
SRB	428	BS	Camp Bondsteel	23	0		0	23		22	22		0							1		23		23	
SRB	435	BR	Brdjani	0	0		0	23		22	23	22	0							1		23		23	
SVK	425	KE	Kosice	23				20		20	23	22	0					23		23				23	
SVK	429	D.	Bratislava	23			22	20	0	22	23	22	0							22				23	
SVK	438	B	Bratislava Barka	0	20	21	19	20		19	23	22								23		1		0	
SVK	438	PE	Poprad Tatry East	0	1	20	0	20		19	23	22	22		23		0	0		23		22	1	0	
SWE	421	BL	Borlange	22	21		23	21		21	22	22	0				0			0	22	1		22	
SWE	421	MF	Halmstad	23	20	21	22	20	1	15	21	22	0	0	22	1	0	22	23	21	22	21	21	19	22

SWE	421	T	Linkoping Saab					23		21	0		0							0		1		3	22
SWE	425	OU	Umea					1		23										23	21			23	
SWE	427	LUE	Kramfors Lunde	23						22										0	23	23			
UKR	430	LI	Lykhacheve	0		21				22			0							0	22				
UKR	432	BB	Bibrka	0	0	20	0	23		21	21	22	0							1		1		22	
UKR	435	SM	Semenivka	0	0	22	0	23		22	0		0		0	1				22	21	21		23	22
XOE	421.5	EGN	Elgin Platform							22								6		0				2	
XOE	426	HWQ	Hewett A Platform							21	23			19	11		0	23	13	13		10	0	10	22
XUE	420	BFK	(UNID)																	0		2		2	
XUE	423	MI	(UNID)																	0		2			
XUE	425	W	(UNID)					22																	
XUE	430	TA	(UNID)		1					23			0												
XUE	435	UAP	(UNID)							0															
Cou	kHz	Call	Location	CZE fr	CZE jp	CZE jv	CZE my	CZE ze	DEU db	DEU hw	DEU je	DEU mo	DEU mz	ENG ag	ENG bk	ENG ds	ENG hh	ENG me	ENG px	ENG py	FIN jt	FRA bx	FRA jj	HOL rb	IRL fo

COUNTRIES HEARD:

This table shows the number of NDBs logged from each radio country by each reporter.

Cou	Country	CZE fr	CZE jp	CZE jv	CZE my	CZE ze	DEU db	DEU hw	DEU je	DEU mo	DEU mz	ENG ag	ENG bk	ENG ds	ENG hh	ENG me	ENG px	ENG py	FIN jt	FRA bx	FRA jj	HOL rb	IRL fo
ALG	Algeria							1			1							1		1		2	
AUT	Austria	2	2	2	1	2	2	2	2	2	2		2	2	2		2	2	1	2	2	2	1
AZR	Azores																	2					
BIH	Bosnia-Hercegovina	1	1	1	1	1		1	1		1							1		1	1	1	
CYP	Cyprus							2															
CZE	Czech Rep.	6	5	5	6	6	1	6	4	5	6	1	2	2	1	2	2	6	1	6	3	5	1
DEU	Germany	5	3	1	3	6	3	6	5	4	6	2	1	2	2	2	3	5		5	2	5	2
DNK	Denmark	1	1			1	1	1	1		1		1	1	1		1	1	1	1	1	1	1
ENG	England	2					2	4	4	1		4	4	4	4	2	4	4		4	3	3	4
ESP	Spain						4	7	1		2		7	4	6	1	4	8		7	8	8	6
FRA	France	2	1		2	1	2	8	7	3	3	2	8	7	6	1	5	12		9	8	10	3

GEO	Georgia		1					1	1							1		1				1	
HNG	Hungary	3	3	2	2	3	1	3	3	3	3					3	1	3		3	2	3	
HRV	Croatia	6	5	5	5	7	3	7	7	6	7	1	5	5	3	5	4	7	1	6	5	7	2
ITA	Italy	2	1		3	5	1	3	2	2	3			1	3	1	1	5		4	2	3	
LBY	Libya	2				1		2			2							2		1		1	
MKD	Macedonia	1	1	1		1		1	1		1							1		1		1	
MNE	Montenegro	1				1		1	1		1							1		1			
POL	Poland	1	2	2	2	2		2	2		1			1				2		2		2	2
POR	Portugal												1		1			2		1	1	1	1
ROU	Romania	3	2	2	2	3		4	3		3				1	1	1	4		1	1	1	
RUS	Russia (Eu)	3	1	1	1	1		5	1		1							1	3	1		1	
SCT	Scotland	1						1	1			1	1	1	1	1	1	1		1	1	1	
SRB	Serbia	3	3	1	3	4		3	3	2	3		1	1	1	1		3		3	1	3	1
SVK	Slovakia	4	2	2	3	4	1	4	4	4	3		1		1	2		4		2	1	4	
SWE	Sweden	3	2	1	2	4	1	5	3	2	3	1	1	1	2	1	1	5	4	4	1	4	2
UKR	Ukraine	3	2	3	2	2		3	2	1	3		1	1				3	2	2		2	1
XOE	Offshore							2	1			1	1		1	2	1	2		1	1	2	1
XUE	UNID		1			1		2			1							2		2		1	
Cou	Country	CZE fr	CZE jp	CZE jv	CZE my	CZE ze	DEU db	DEU hw	DEU je	DEU mo	DEU mz	ENG ag	ENG bk	ENG ds	ENG hh	ENG me	ENG px	ENG py	FIN jt	FRA bx	FRA jj	HOL rb	IRL fo

LISTENING TIMES:

This table shows the number of NDBs logged by each reporter during the time periods.

UTC (hh)	CZE fr	CZE jp	CZE jv	CZE my	CZE ze	DEU db	DEU hw	DEU je	DEU mo	DEU mz	ENG ag	ENG bk	ENG ds	ENG hh	ENG me	ENG px	ENG py	FIN jt	FRA bx	FRA jj	HOL rb	IRL fo
00:00 - 00:59	28	10		10	1	12	14	11		54	9	2	10	28	3	1	13	2	7	11	6	
01:00 - 01:59		6		3	4	4	8	1					8	1			15		8	4	2	
02:00 - 02:59				1		6				1			2				3		12	16	10	
03:00 - 03:59																	3			2	12	
04:00 - 04:59																	2			1		
05:00 - 05:59																						
06:00 - 06:59														1	1							

07:00 - 07:59																						
08:00 - 08:59																						
09:00 - 09:59																						
10:00 - 10:59																			7		8	
11:00 - 11:59												6										
12:00 - 12:59												1										
13:00 - 13:59			1													4	8		1			
14:00 - 14:59																			1			
15:00 - 15:59							7															
16:00 - 16:59				1																		
17:00 - 17:59				1																		
18:00 - 18:59			2	1										4			1			1		
19:00 - 19:59			9	4			9				4					1					4	
20:00 - 20:59		6	6	2	26		5	8				5				1				1	4	
21:00 - 21:59		5	7	4	7		17	3				2	1		3	6	9	3	7	2		
22:00 - 22:59	5	4	4	5	10		23	27	35	2		10	5	2	3	5	19	5	21	2	9	26
23:00 - 23:59	22	8		6	8		4	10				11	7		16	13	18	3	8	4	20	2
UTC (hh)	CZE fr	CZE jp	CZE jv	CZE my	CZE ze	DEU db	DEU hw	DEU je	DEU mo	DEU mz	ENG ag	ENG bk	ENG ds	ENG hh	ENG me	ENG px	ENG py	FIN jt	FRA bx	FRA jj	HOL rb	IRL fo

NDB COUNTS, BY FREQUENCY:

The number of NDBs logged by each reporter on each frequency and the number logged by all on each frequency, ignoring offsets:

NDBs	kHz	CZE fr	CZE jp	CZE jv	CZE my	CZE ze	DEU db	DEU hw	DEU je	DEU mo	DEU mz	ENG ag	ENG bk	ENG ds	ENG hh	ENG me	ENG px	ENG py	FIN jt	FRA bx	FRA jj	HOL rb	IRL fo
10	420	5	3	2	4	6	1	5	5	3	5		2	1	1	2	2	9	1	7	2	7	
7	421	4	2	1	4	5	4	7	7	3	6	2	3	3	5	2	3	7	2	6	4	6	3
1	421.5							1								1		1				1	
4	422	3	3	2	2	3	1	4	3	2	3	1	2	2	3	1	2	4	1	3	3	3	2
9	423	2	4	2	2	4	3	7	4	1	3	1	4	4	4	2	3	9	1	8	5	7	5
5	424	1	1	1	2	1	2	4	2	1	2		3	3	3	1	2	3		4	3	4	2
7	425	3	1	2	3	6	1	4	3	2	3	1	2	1	2	2	1	6	1	4	3	5	2
9	426	2	2	2	1	4	3	7	4	2	3	3	4	2	6	2	5	9	1	6	4	6	4

5	427	2			1	2		4	3	1	1		2	2	2	1	1	5	1	5	3	4	1
6	428	2	2	1	2	2		4	5	1	3	1	2	2	3	2	3	6		3	3	4	1
7	429	5	3	3	4	6	2	5	4	5	6	1	1	2	1	1	1	5	1	4	2	4	
6	430	3	4	2	2	2	2	5	3	2	4		1	1	1	2	2	4	2	2	2	3	
2	431	2	1			1	1	2	1	1	1	1	1	2	1	1	2	2		2	1	2	1
6	432	4	4	3	3	4		5	4	2	4		2	1		1	1	4		4	1	4	
3	433	1	1	1	1	1	1	3	1	1	1		3	2	1	1	1	3		2	3	3	3
1	433.5	1						1	1	1		1	1	1	1	1	1	1		1	1	1	1
4	434	4		1	1	1	1	4	3	2	3	1	1	1	1		1	3	1	2	1	2	1
7	435	5	2	1	2	2		7	2	1	4		1	1				4	1	3		3	1
1	436	1	1	1		1		1	1	1	1					1		1		1	1	1	
3	437	1	1	1	1	1		3	1		1			1				1		1		1	1
4	438	4	4	3	3	4		4	3	3	3		2	1	1	2		4		4	2	4	
0	439																						
NDBs	**kHz**	CZE fr	CZE jp	CZE jv	CZE my	CZE ze	DEU db	DEU hw	DEU je	DEU mo	DEU mz	ENG ag	ENG bk	ENG ds	ENG hh	ENG me	ENG px	ENG py	FIN jt	FRA bx	FRA jj	HOL rb	IRL fo

MOBs

The following NDBs were heard by one reporter only - 'Mine Only Beacons' !

kHz	C/S	Location	Cou	**Reporter**		UTC
429	KDR	Kadra	LBY	**CZE**	**ze**	22:32
420	BT	Batajnica	SRB	**CZE**	**ze**	22:53
425	W	(UNID)	XUE	**CZE**	**ze**	22:06
435	GKE	Gazimagosa Intl	CYP	**DEU**	**hw**	00:25
432	LCA	Larnaca	CYP	**DEU**	**hw**	01:03
437	DE	Moskva Domodedovo	RUS	**DEU**	**hw**	22:39
437	DW	Moskva Domodedovo	RUS	**DEU**	**hw**	23:01
435	UAP	(UNID)	XUE	**DEU**	**hw**	00:32
429	GBL	Giebelstadt	DEU	**DEU**	**mz**	00:12
420	PI	Pico Is.	AZR	**ENG**	**py**	04:00
428	GC	Santa Cruz de	AZR	**ENG**	**py**	04:10
426	CTS	Castets	FRA	**ENG**	**py**	03:00

426	CB	Coimbra	POR	**ENG**	**py**	23:38
430	AJ	Staritsa	RUS	**FIN**	**jt**	22:54
424	GRS	Ghriss	ALG	**HOL**	**rb**	02:50

TABs

Trans-Atlantic Beacons' - NDBs that joined in the fun on both sides of the Atlantic

None this time

FREQUENCIES REVISITED - Progress Statistics

(Please see the explanation below)

THEN:	CLE113	420 - 439.9 kHz	23 - 26 Jan 2009
NOW:	CLE131	420 - 439.9 kHz	28 - 31 May 2010

Listener	Av km THEN	Av km NOW	Total km x 1000 THEN	Total km x 1000 NOW	NDBs THEN	NDBs NOW	Max km THEN	Max km NOW
CZE jv		537		16		29		1409
CZE my		595		23		38		1599
DEU db		786		17		22		1502
ENG hh		1079		39		36		2001
ENG px		995		31		31		1973
FRA bx		1020		71		70		2205
Averages:		835		33		38		1782

Listener	Av km THEN	Av km NOW	Total km x 1000 THEN	Total km x 1000 NOW	NDBs THEN	NDBs NOW	Max km THEN	Max km NOW
CZE fr	848	778	50	43	59	55	2787	2787
CZE jp	853	655	34	25	40	38	2868	2252

CZE ze	820	673	47	37	57	55	2873	2046
DEU hw	1217	1119	124	95	102	85	3701	3052
DEU je	1148	989	83	59	72	60	3815	2691
DEU mo	1037	688	79	24	76	35	3308	1330
DEU mz	925	822	58	46	63	56	2901	2901
ENG ag	1111	693	49	9	44	13	2536	1575
ENG bk	1190	975	77	36	65	37	3341	2251
ENG ds	1008	991	42	33	42	33	3082	2241
ENG me	1310	1348	80	35	61	26	3454	3448
ENG py	1308	1274	118	113	90	89	3513	3272
FIN jt	1347	999	55	13	41	13	3325	1986
FRA jj	1070	959	63	42	59	44	2890	1671
HOL rb	1174	1121	94	83	80	74	3067	3067
IRL fo	1367	1431	37	40	27	28	3639	2606
Averages:	1108	970	68	46	61	46	3194	2449
% Increase:		-13		-33		-24		-23

Av. km = Average distance from listener to NDB for all their loggings
Total km = Sum of distances from listener to NDBs for all their loggings
NDBs = Number of NDBs logged
Max km = Maximum distance from listener to an NDB logged
(UNIDs are not included)

Explanation:

We ENJOY Listening Events, but their real value is to encourage us to improve our knowledge of our hobby, our listening techniques, our receivers and aerials, etc. Many of our CLEs re-use the same narrow range of frequencies after a year or so. This can provide each of us with an excellent way of measuring our personal progress by comparing our results THEN with our corresponding results NOW.

The lower table shows statistics for listeners who took part in both the events. The bottom lines compare the general conditions found during the two events.

Each listener's own results also depend, of course, on many other things, such as changes in receivers or aerials, time available for listening, use of recording equipment and maybe a move of QTH, as well as progress made through listening practice.

Comparing the results between individual listeners is not very meaningful -
we each have so many unavoidable things that affect our ability to hear NDBs;
where we and they happen to be, whether we are in a city or in wide open spaces
or by the sea, our spending limit, how long we are able to devote to listening, etc.

CLE131e5.xls
bk 2 June 2010