

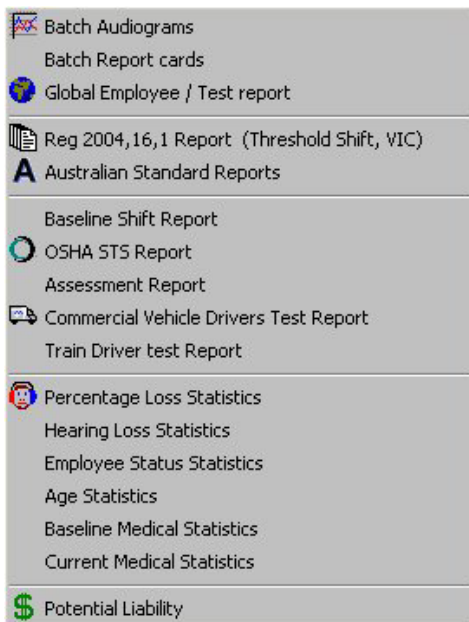


Information Booklet

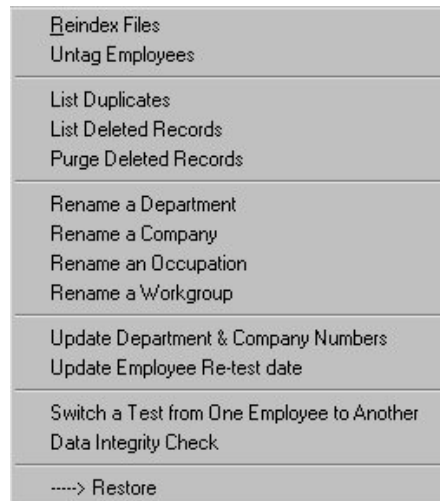
Features	Benefits
Data entry of Employee (or Client) <ul style="list-style-type: none"> - Personal details - Employment history - Medical history - Company details - 	<p>Immediate access to your employees (Clients) Alphabetically, by Work number, by Company, Department or Cost Center.</p> <p>The software can be used to manage the Employees of one or more companies, there is no limit to the number.</p>
Data entry of test data <ul style="list-style-type: none"> - Test questionnaire - Automatic next test date - Air conduction test - Optional Bone conduction test - Optional Spirometry - Optional Tympanometry - 	<p>Data over the years can be compared to alert you in case of degradation in hearing capacity.</p> <p>Optional tests can be enabled or disabled as required.</p>
Automatic or Manual test acquisition	<p>Automatic test and data acquisition maximises the use of your time and guaranties 100% accuracy between the audiometer results and your records.</p>
Calculation of the percentage loss	<p>3 methods are available NSW , VIC (Nal 1988) WA (Nal 1988 extended) An additional report shows incremental loss for each frequency.</p>
Reports & Assessments	<p>Many reports are available, they cover the all the Australian state legislations as well as New Zealand and overseas requirements.</p> <p>Instant assessment is also available and covers Call centers, Commercial vehicle, train & tram drivers.</p>
Lists	<p>Employees can be listed with a variety of criteria in several formats.</p> <p>More option can be obtained with the “:Export to Excel” function where users can create their own criteria.</p>
Re-Test Management	<p>Effectively automates informing your employees or department heads about your re-test requirements.</p>
Training Management	<p>Training could mean Hearing protector training or whatever requirements are in force in your workplace. This feature can be enabled individually for each Employee.</p>
Hearing Protection Management	<p>Optionally you can automatically assess the suitability of hearing protectors worn by the employees against the level of noise in their work environment.</p>
Financial Risk Management	<p>A Potential Liability report will allow you put a value on the maximum financial risk is at anytime for management reports.</p>
Extensive configuration options	<p>The software is easily configurable through the Setup Menu. Most of the information is kept in tables with virtually unlimited capacity.</p>
Large number of Utility functions	<p>Utility functions are useful, for example when a Department changes name you may have to change it in 2000 employees records. In this case you just use the “Rename Department” function.</p>
Form Letters	<p>Form letters are easy to use and very efficient. You can customise the existing ones and add new ones, using the Merge fields to include Employees or Tests information automatically.</p>

The Program's Menu System

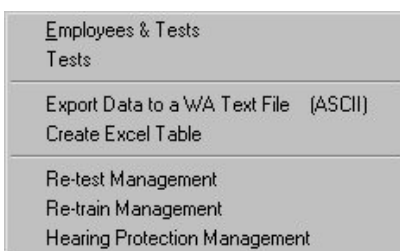
The Report Menu



The Utility Menu



The Setup Menu



The List Menu



Employee and Test data

Surname	Ilame	Work Ilo	Status	Shift	Code	Re test
ASPARTATE	Gomul		N			18/04/2002
BELLA	DONNA		P	red	123456789*	17/02/2002
BLOB	Fred		W			12/12/1993
BLOGGS	Freddy		T			12/12/1993
LARY	CAN	12313	H	ASD	123	08/02/2002
STRADIVARIUS	Viola	12345	C	45	12345	12/10/1999
ZOASTER	Sam	12345	T			
ZORRO	The gay blade	12	D	12		

Surname: Search

Employee order by: Surname

Assessment:

Status: **Terminated**

Employee **Test**

Tested:

Test: **12/12/1992** **Routine Test**

Next test: 12/12/1993 Next training: 12/12/1994

Hearing protection

Type of protection worn: Muffs

Hearing protection Class: 2

Protection worn before test: ☐

Protection usually worn: ☐

Training provided: ☐

Details at time of test

Period of employment: 1 Years Age 80

Occupation: COOK

Department: FOUNDRY

Audiometer: Audiometer 2 Calibrated 4/04/2000

Tester: Goody Gumdrops Approval 1234

Comments

Graph

Air Graph Medical Spiro Tymp Bone

5k 1k 1.5k 2k 3k 4k 6k 8k

0 10 20 30 40 50 60 70 80 90

The Data entry screen showing the Employee and test data

Hearing test assessment report

Australian Standards

- (a) Shift from baseline averaged at 3000, 4000 and 6000Hz => 5 dB
- (b) Shift from baseline averaged at 3000 and 4000 => 10 dB
- (c) Shift from baseline averaged at 6000 => 15 dB
- (d) Shift from baseline at 500, 1000, 1500 or 2000 => 15 dB
- (e) Shift from baseline at 8000 => 20 dB

Victorian regulation 2007 3.2.11 & New Zealand Standards

- (16,1) Shift >= 15db at 3000, 4000 or 6000Hz between last test and previous test

Rio Tinto

- (f) Current thresholds averaged over 1000, 2000 and 3000 Hz => 25 dB in both ears, age corrected

OSHA S.T.S. (01/01/2003)

- (1) Shift from baseline averaged at 2000, 3000 and 4000Hz => 10 dB, age corrected
- (2) Average absolute at 2000, 3000 and 4000 => 25 dB same ear as in (1)

OSHA S.T.S. (Canada)

- (3) Shift from baseline at 2000, 3000 and 4000Hz => 30 dB, age adjusted

Commercial vehicle and Tram Drivers

Pass = average at 500, 1000, 2000 and 3000Hz in better ear < 40 dB

Train Drivers

Pass = average at 500, 1000 and 2000Hz in better ear < 40 dB



The software has assessed this employee according to the standards outlined on the left.

The result of the assessment is shown below.

An X in a box means that a person has a hearing shift exceeding the level permitted by that standard, therefore testing positive.

Note: Only the Australian standard and the OSHA STS are using the base line.

Baseline is defined as the latest test with a test type = B, or if not present, the oldest test

Number of tests: 2
Baseline test date: 02/03/2004
Last tested on: 20/12/2006

Australian Standard					Req. 2007 3.2.11	Rio	OSHA S.T.S.			Age corrected S.T.S.	
(a)	(b)	(c)	(d)	(e)	(f)	(1)	(2)	(3)	Left	Right	
X									1	3	

Phone Call centre Operators	Drivers Commercial vehicles & Trams	
Fail	Pass	Pass

The assessment page showing the assessment results based on each of the standards

Change an Employee

Surname: **BLOGGS** Name: **Freddy** Work No:

Street: Suburb: Postcode: State: Sex:

Telephone:

Actions allowed

Allow Re-Test ☒ Allow Re-train ☒

Actions

Date of birth: Entered: Next test due: Next training:

Occupation: Department: Workgroup: Protector Class required:

Company:

Comment

Workplace

Status: Code: Shift: Commencement date: Termination date: Claim submitted ☐ Claim settled ☐

PREVIOUS EMPLOYERS

1 -
2 -
3 -

MEDICAL HISTORY

Medical history changed ☐ Exposure to explosive/gun fire ☐ Military service ☐ History of hearing troubles ☐ Exposure to childhood antibiotics ☐

Noisy Hobbies ☒ Ringing ears ☒ Power Tools ☐ Frequent Colds ☐ Dizziness ☐ Discharges ☐ Referred medically ☐ Mumps / Measles ☐

Comments

The data entry screen showing the Employee data page

Data cable

Audiogram

Transfer data to software
With the push of a button

Range Test Data

Employee: **Freddy** DOB: **06/04/2006** Age: **1**

Period of employment: **1** Visual: ☐

Type of Test: **Routine Test**

Is this the current Reference Test? ☐

Visual examination of the left ear: ☐ Normal ☐ Abnormal

Visual examination of the right ear: ☐ Normal ☐ Abnormal

Occupation: **COOK** Department: **FOUNDRY**

Hearing protection

Protection worn before test: ☐ Protection usually worn: ☐ Training provided: ☐

Protector correctly fitted: ☐

Protector Type: **Muffs**

Select Protector: **2**

Protector integrated: ☐

Protector Class: **0**

Conduction thresholds

Left: 20 30 25 25 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Right: 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Re-Test: 20 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Mean: 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Percentage loss

Percentage loss: **0.0** %

Recalculate %: **0.0** %

Vehicle driver test

Left: **0.0** dB

Right: **0.0** dB

Average at 50, 100, 200, 400, 800 Hz: **0.0** dB

Graph

Medical: ☐ Acoustic: ☐ Tympanometry: ☐ Bone: ☐

Graph: ☐ Medical: ☐ Acoustic: ☐ Tympanometry: ☐ Bone: ☐

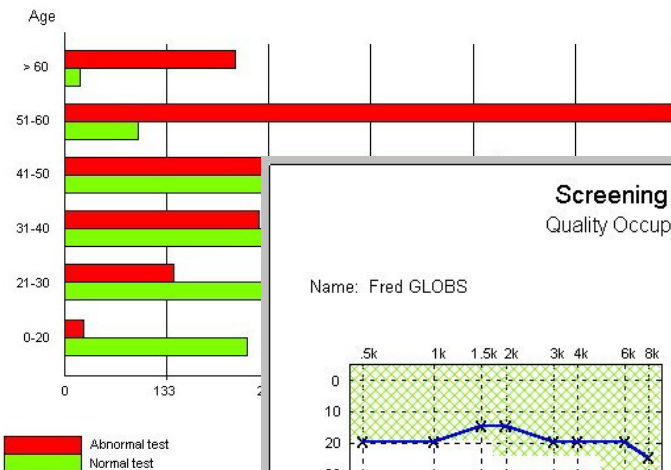
Save ☒ Cancel

Easy transfer of the data from a number of Audiometer brands, to the software, where all the data analysis required for Hearing Conservation and Workcover regulations is available.

Age Statistics

Printed: 20/02/2002 5:52:13 PM
Selection: All Employees and Date tested from 01/04/1998 to 31/08/2001
Not including Terminated, Deceased

Age	0-20	21-30	31-40	41-50	51-60	> 60	Total
Normal	240	767	478	260	98	22	1865
Abnormal	27	144	256	565	799	224	2015
Total	267	911	734	825	897	246	3880



Statistical reports

On the left is one of the statistical report. This one shows the normal and abnormal population by age.

Other Statistical reports are available.

Screening Audiometry Report

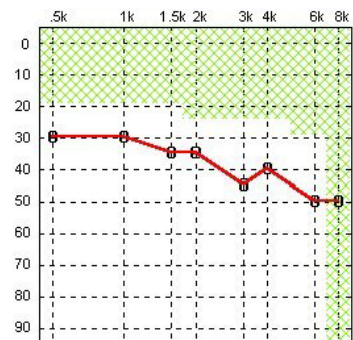
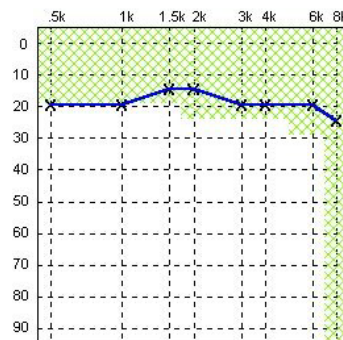
Quality Occupational Health Personnel

Name: Fred GLOBS

DOB: 21/04/2000

Age:

Sex: Male



Thresholds

	0.5kHz	1kHz	1.5kHz	2kHz	3kHz	4kHz	6kHz	8kHz	
Left	20	20	15	15	20	20	20	25	dB
Right	30	30	35	35	45	40	50	50	dB

Percentage Loss

	Left		Right		Binaural	
	Age correction		Age correction		Age correction	
	Before	After	Before	After	Before	After
0.5kHz	0.60		2.80		1.4	
1kHz	0.60		3.50		1.7	
1.5kHz	0.00		4.50		1.3	
2kHz	0.00		3.40		1.0	
3kHz	0.30		4.10		1.3	
4kHz	0.00		2.50		0.6	
6kHz						
8kHz						
Total	1.7	1.7	20.8	20.8	7.3	7.3

Calculation method : % Loss age corrected, NAL Tables 1988

Comments:

The Percentage Loss Report

This report shows the breakdown of the loss per frequency. It is based on a choice of one of 3 formula

- 1- NAL 1973
- 2- NAL 1988
- 3- NAL 1988 Extended

Additionally the result can be corrected for age (presbycusis) or not

Tested by:

Date: 05/01/2001

Signed:

Quality Occupational Health Personnel

Fred GLOBS 15 Norfolk Street PADDINGTON NSW 3031										DOB: 21/04/2000 Age: 0 Sex: Male Tel: Extension: Shift: Work No: OIUP01 Number of tests: 3									
Entered: 21/04/2000 Status: Permanent - Noise exposed Commencement Date: 21/04/2000 Years employed: -5 Department: Admin Company: ROBERTSON AND SON Occupation: Clerk Address: 56 PARRAMATTA ROAD, BURWOOD Claim submitted <input type="checkbox"/> Claim settled <input type="checkbox"/> Comments:																			
Date	Left ear								Right ear								% Loss		
	0.5k	1k	1.5k	2k	3k	4k	6k	8k	0.5k	1k	1.5k	2k	3k	4k	6k	8k	Left	Right	Binaural
20/02/1996	10	20	10	10	10	20	20	20	20	30	30	30	40	40	50	40	0.8	14.7	5.2
17/02/1999	15	20	10	10	20	10	20	25	20	35	30	35	45	40	50	45	1.3	19.1	6.7
05/01/2001	20	20	15	15	20	20	20	25	30	30	35	35	45	40	50	50	1.7	20.8	7.3
	10	0	5	5	10	0	0	5	10	0	5	5	5	0	0	10	First test vs Last test		

The report card, on the left, includes all the tests an Employee has undergone over the years.

The last line is the loss incurred over the years.

Hearing Assessment Report
Quality Occupational Health Personnel

Fred GLOBS 15 Norfolk Street PADDINGTON NSW 2031		DOB: 21/04/2000 Age: 1 Sex: Male Tel: Extension: Shift: Work No: OIUPOI Number of tests: 1	
---	--	---	--

Entered: 21/04/2000	Status: Permanent - Noise exposed	Commencement Date: 21/04/2000	Years employed: 1
Department: Admin		Company: ROBERTSON AND SON	
Occupation: Clerk		Address: 56 PARRAMATTA ROAD, BURWOOD	

Comments:

Previous Employers

1- Telstra
 2-
 3-

Military service: ☐ Years:
 History of hearing troubles: ☐
 Comments: Claim submitted ☐ Claim settled ☐

Medical history (as of last test)

Noisy Hobbies: ☒ Ringing ears: ☐
 Power Tools: ☒ Frequent Colds: ☒
 Dizziness: ☐ Discharges: ☐
 Head Injury: ☐
 Exposure to childhood antibiotics: ☐
 Exposure to explosive/gun fire: ☐

Hearing Test

Date tested: 20/02/2002 Age at test: 1
 Test Type: Baseline Test
 Period of quiet before test:
 Protection worn before test: ☒
 Protection usually worn: ☒
 Currently has ear ache?: ☐
 Type of protection worn: Class: 0
 Work group Class:
 Audiometer: AS7 Calibrated: 1/01/2000
 Serial No: 12345

Air Test

	5k	1k	1.5k	2k	3k	4k	6k	8k	Hz
Left	10	20	10	10	10	20	20	20	dB
Right	20	30	30	30	40	40	50	40	dB

	Visual exam	Hearing Test	% Loss	Binaural
Left		Normal	0.8	5.2
Right		Abnormal	14.7	

% Loss age corrected, NAL Tables 1988

Spirometry

FCV	FEV1	Ratio	FEF	PEF

Re-Test

	3k	4k	6k	Hz
Left				dB
Right				dB

Left

Right

Comments:

Actions

Training provided: ☐ Referred medically: ☐

Further actions

Next test: 20/02/2004 Next training: 20/02/2006

Tested by: T Harris

Approval # OHN

Date: 20/02/2002

Signed

On the right, can be configured to show Air, re-test, Spirometry and Bone conduction as required.

The graph colours and normal levels are also configurable.

Listing Employee, Test and Re-test management

List Employee data

List Employees

Option 1

- ☒ All
- ☐ By date of last test
- ☐ By Shift
- ☐ By Company
- ☐ By Department
- ☐ By Company & Department
- ☐ By Occupation
- ☐ By Employee's Postcode
- ☐ By tag
- ☐ By Workg

• = High speed search

Option 2

- ☒ All
- ☐ By date of last test
- ☐ If last Test is Abnormal
- ☐ If last Test is Normal
- ☐ If % loss both sides greater than X
- ☐ By a keyword in the Test comments
- ☐ By Employee's Status
- ☐ By Shift
- ☐ By Workg
- ☐ By Cost Centre
- ☐ Claim submitted
- ☐ Claim settled

Output

- ☒ Screen
- ☐ Printer
- ☐ pdf File
- ☐ Labels
- ☐ Letters
- ☐ Mail Merge

Format

- ☒ Audio data
- ☐ Personal data
- ☐ Company data
- ☐ Short personal

Include

- ☐ Deceased
- ☐ Terminated

Printer Setup Page Setup Top margin = 10 Left margin = 10 Orientation = Landscape Start Exit

Employees and test can be listed by companies, departments, date of test etc. The report can be saved in various formats, including pdf or exported. Lists can be mailmerged to a template letters or as labels.

Re-test Scheduling

Re-Test Scheduling

Option 1

- ☒ All
- ☐ By Shift
- ☐ By Company
- ☐ By Department
- ☐ By Company & Department
- ☐ By Tag
- ☐ By Workg

• = High speed search

Option 2

- ☒ All
- ☐ By Shift
- ☐ By Occupation
- ☐ By Employee's Status
- ☐ By Workg
- ☐ By Cost Centre

Output

- ☒ Screen
- ☐ Printer
- ☐ pdf file
- ☐ Labels
- ☐ Mail Merge

Display Order

- ☒ Alphabetical
- ☐ By Retest date

Search Type

- ☒ Re tests due
- ☐ Re tests overdue

Re-Test due

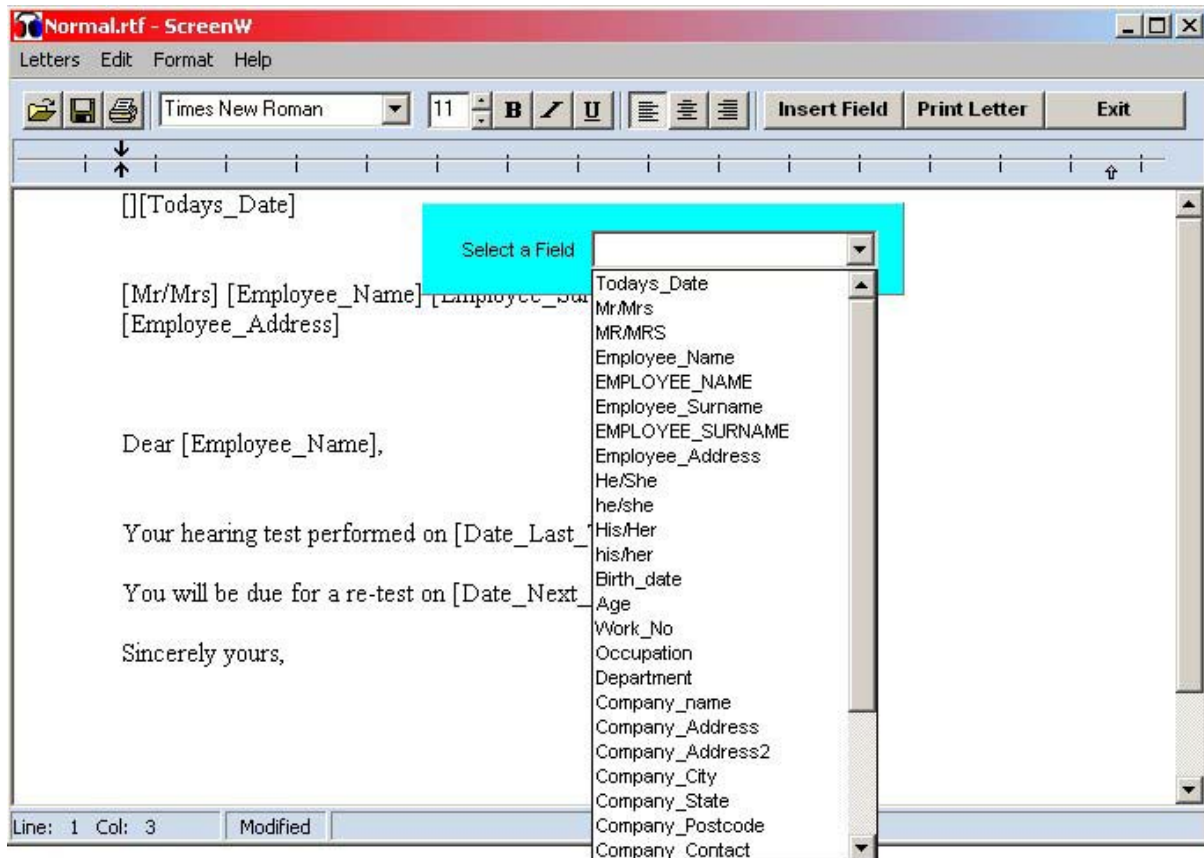
From 31/08/1990 To 20/09/2005

Printer Setup Page Setup Top margins = 10 Left margin = 10 Orientation = Landscape Start Exit

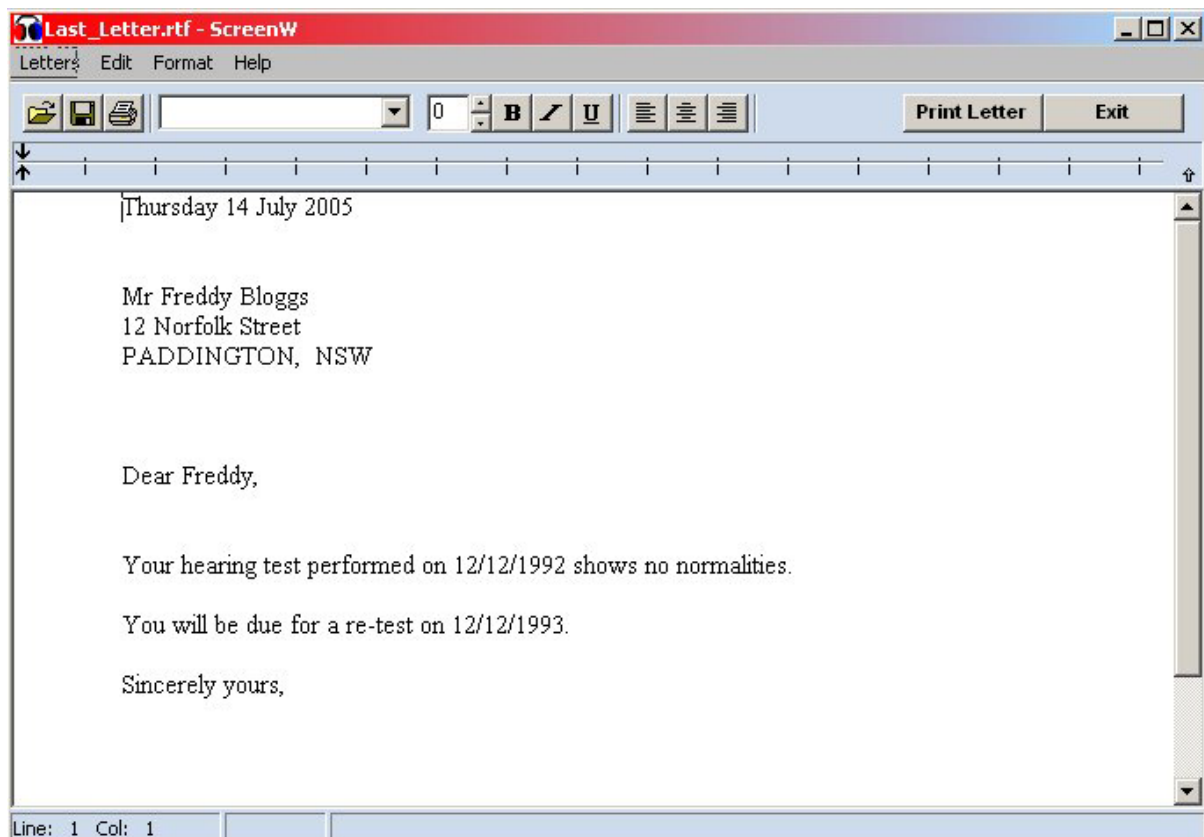
The software has powerful re-test management facility. Employees to be re-tested can be listed. The departments or companies who have employees due for retest can also be listed to save time.

The same facility is available to manage training if required

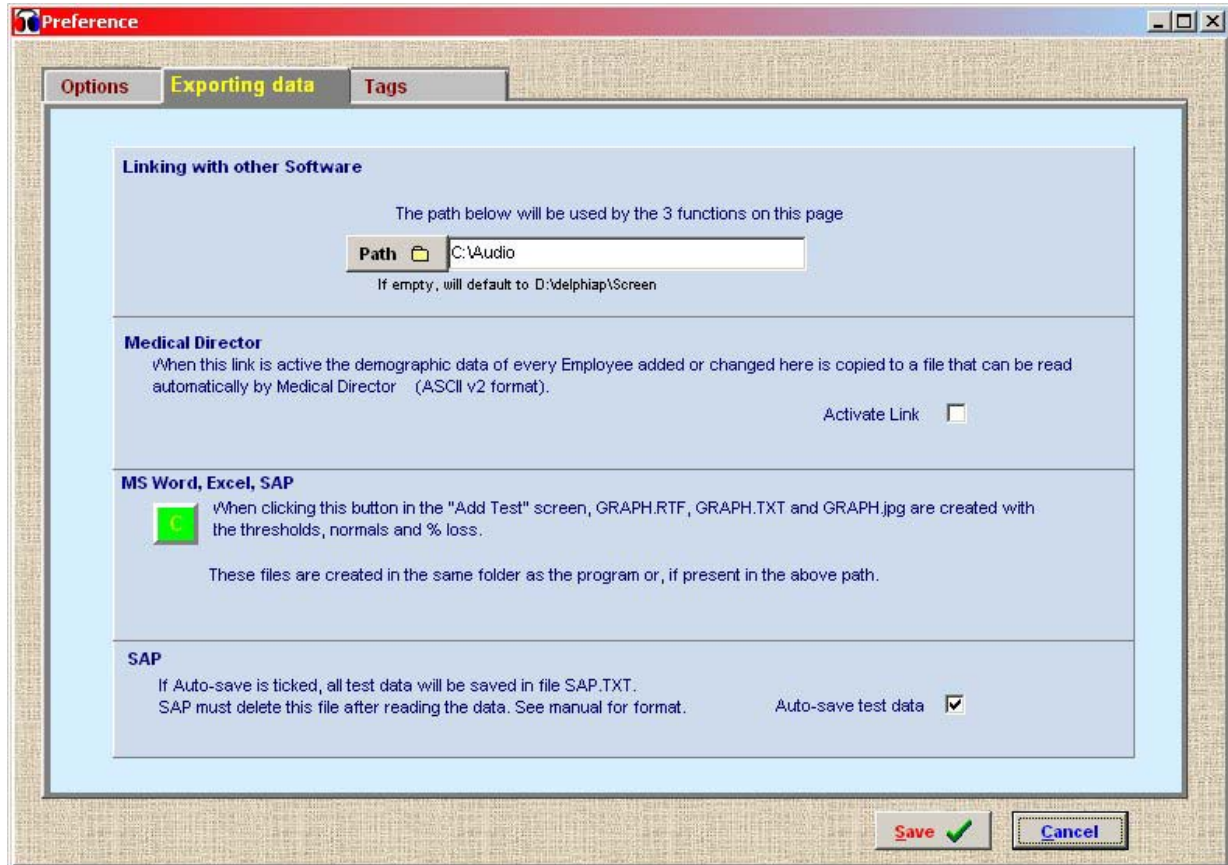
The Template Letter System



The above Template letter contains Merge fields which can be selected from a dropdown list. The Template file is saved as an RTF file, which can be read and spell checked by MS Word if required.



The same template letter used with an Employee automatically uses the relevant Employee data.



Interfacing with Medical Director

The software can be programmed to send each new employee personal data to Medical Director automatically.

The test data can be copied by clicking on the green button in the test screen and pasted anywhere. In addition the green button creates 3 test data files in rtf, txt and jpg format respectively, containing the test data.

Interfacing with SAP

When a test is created the data is pushed into a text file in comma delimited format, which can be read, then deleted by SAP. The program then creates a new one and starts adding data again to it.

Interfacing with other data

The system used by SAP can be used by any external program. This data can also be read by MS Excel and other spreadsheet programs.

The above screen allows enabling and configuration of these options.

Browse Companies

Search: Doubleclick the Company you want to use

Company name	Tag	Company address	No	CONTACT	TEL
ROBERTSON AND SON		56 PARRAMATTA ROAD	4	JOHN SURNAME	02 9234 5678
SINKWELL PTY LTD		12 PARIS AVENUE	2		
TED'S BAKERY		15 NORFOLK STREET	1		
TELSTRA		SERG SERG SERG WERG W	1		

Default Company: TELSTRA

Buttons: Set Default, Email, Labels, Add, Edit, Del / Undel, Print, Exit

Setting up a Company list

The software is happy to work with one company, but can also manage multi companies including multiple sites per company. There are no limit to the number of companies.

Browse Workgroups

Search: Workgroup Details

Workgroup Name	Tag	L Aeq, 8h	Tonal expos.	Class	#	Special
CLERK		75		0	2	
COOK		85		0	2	
FOUNDRY		95		3	1	
OFFICE WORK		80		0	1	
PAINTER		80		0	1	

Default Workgroup:

Buttons: Add, Edit, Del / Undel, Print, Exit

Workgroup Details

The Classification concept and Hearing protector data have been kindly supplied by NAL.

You can enter a noise exposure value L Aeq, 8h, in dB(A). This value, if below 110 dB and not a tonal noise, will give this Workgroup a Protector classification that will be used to assess the protector required for this area.

This system is compliant with Australian standard 1269 and will allow you to assess the suitability of an employee's hearing protection by running the HPD report.

The HPD report will compare the protector class in the employee's workgroup with the class of the protector worn at the time of the last test

Beware that this system is only designed to cover non tonal noise levels below 110 dB(A). For higher noise levels or tonal noises, please refer to a noise professional.

Setting up the Workgroups

Workgroups can be used in different ways. Here it is used to mean an area of same noise exposure level. This level can be compared with the Hearing Protectors worn by the Employees. It can be renamed to anything, example: "Cost Center"

Browse Hearing Protectors

Search for a Class: Class Make Model Doubleclick the Hearing Protector you want to use

Model	Tag	Class	Make	Type	Description	SLC 80
FOAM				Foam plugs	Standard foam plugs	0
MUFF				Ear muffs	Standard muffs	0
PLUGS				Ear plugs	Standard plugs	0
EMLF-48	1	PROTECTOR		Ear muffs	Safety Products EMLF-48	11
YELLOW 2500H MSA	1	UVEX		Helmet muffs	Yellow 2500H on MSA Hard hat	11
PHONSTOP	1	AM		Ear plugs	Phonstop	13
PROPP-O-PLAST	1	BILSOM		Ear plugs	Propp-O-Plast	12
CANALCAPS	1	CIGWELD		Ear plugs	Canalcaps	10
EAR DEFENDERS	1	MINE SAFETY		Ear plugs	Mine Safety Appliances Ear Defenders	12
DBA	1	RACAL SAFETY		Ear plugs	Racal Safety DBA	12
H.I.C.	1	TASCO		Ear plugs	H.I.C.	13
2470 COMPACT	2	BILSOM		Ear muffs	2470 Compact	17
SILENCER	2	CIGWELD		Ear muffs	Silencer 455200-1990	16
SILENTA ERGO II	2	KEMIRA		Ear muffs	Silenta Ergo II Cap attachment P/N 455308	15
SILENTA UNIC	2	KEMIRA		Ear muffs	Silenta Unicap Cap attachment P/N 455273	16
HUSHMUFF MK II	2	MINE SAFETY		Ear muffs	Mine Safety Appliances Hushmuff MK II 222775-09	17
NOISEFOE IV	2	MINE SAFETY		Ear muffs	Mine Safety Appliances Noisefoe MK IV	16
EML10 (FRE 1987)	2	PROTECTOR		Ear muffs	Safety Products EML10(pre-1987)	15
EMLU-47	2	PROTECTOR		Ear muffs	Safety Products EMLU-47	16
HUSHMUFF22215006	2	MINE SAFETY		Helmet muffs	Hushmuff 22215006	15
EMCC-50	2	PROTECTOR		Helmet muffs	Safety Products EMCC-50	14
EMM71	2	PROTECTOR		Helmet muffs	Safety Products EMM71	16

Buttons: Add, Edit, Del / Undel, Print, Exit

The software will allow you to compare the Class of noise employees are exposed to with the class of the hearing protection device they are wearing.
 The Class of noise the employee is exposed to is stored with the Workgroup/Workgroup
 The Hearing protection device comparison mechanism in this software is based on The Australian Standard 1269.
 Warning: This system is only covers Non Tonal noise levels up to 110 dB. For higher noise levels or tonal noises, please refer to a noise professional.

Setting up the hearing Protectors

The software comes with an existing list of protector which can be added to.

This feature can be used if required, in conjunction with the Workgroups, but it is not compulsory.