Note: This report is very, very dense. It will behoove anyone understanding of the issue, particularly regarding effects on people, for it is important because it is the basis for many current Federal policies regarding aviation noise. It does have a very complete bibliography and a very good table of contents.

AVIATION NOISE EFFECTS

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC

PB-80-35

TABLE OF CONTENTS

			PAGE
Table of Contents			iii
List of Figures			vii
List of Tables			viii
Section	1.0	General Introduction	1
Section	2.0	Noise Metrics	3
	2.1	Introduction	4
	2.2	Sound Exposure Response based Level Metrics	5
		A-Weighted Sound Level (dBA)	5
		A-Weighted Sound Level	5
		Perceived Noise Level (PNL)	6
		Tone-Corrected Perceived Noise Level (PNLT)	6
	2.3	Noise Event Dose Time Metrics	7
		Effective Perceived Noise Level (EPNL)	7
		Noise Exposure Forecast (NEF)	8
	2.4	Cumulative Noise Metrics	12
		Equivalent Sound Level (Leq)	12
		Traffic Noise Index (TNI)	13
		Noise Pollution Level (NPL)	13
		Noise Exposure Forecast (NEF)	14
	2.5	Cumulative Noise Metrics	15
		Day-Night Level (Ldn)	15
		Ldn, Levels, Goals, CNE	16
	2.6	EPA, The Nonaud Cumulative Noise Energy Metric	17
		Evaluation of the EPA Metric in Relation Without Noise Impact Assessment	17
	2.7	Summary of Noise Metrics Policy	17
		Noise Metrics Applications	17
	2.8	Interviews and Aircraft Noise	18
		Interviews	18
	2.9	Perception of Noise	20

Top

			PAGE
	3.1	Complaint Effective Response	20
		Functional Disability	21
	3.2	Physical Disability	21
		Hearing Damage Risk Criteria	22
	3.3	Conclusions	23
Section	4.0	Different Sources Different Reasons Response?	27
	4.1	Introduction	28
	4.2	Schultz, Kryter Debate	29
	4.3	Hall's Research and Analysis	31
		Conclusions	32
Section	5.0	Heritage and Mystery Loss	33
	5.1	Introduction	33
	5.2	The Heritage Phenomena	33
		Auditory Masks	34
	5.3	Effects of Noise on Hearing	35
		Hearing Loss	35
		ARTA	35
		Tinnitus	35
	5.4	Tinnitus Risk Criteria	36
	5.5	Review of Studies	36
	5.6	Auditory Stimuli Noise	37
		Community Response Loss	38
	5.7	Current Research on Tinnitus Prevention	39
	5.8	Prevention of Hearing	40
	5.9	Conclusions	41
Section	6.0	Sleep Disturbance	42
	6.1	Introduction	43
	6.2	Measures of Sleep Disturbance	45
	6.3	Associate Sleep Disturbance	47

Top

			PAGE
	6.4	Sleep Disturbance on the Ground	47
	6.5	Sleep Disturbance on the Ground	48
	6.6	Sleep Disturbance	51
		Introduction	52
	7.2	Noise Disturbance Response	53
	7.3	Hearing Loss Response	54
	7.4	Annoyance Noise	55
	7.5	Sleep Disturbance Response	56
	7.6	Conversion and Interference	57
	7.7	2ST Calculation Review	58
	7.8	Summary	59
Section	8.0	Non Auditory Effects of Noise	61
	8.1	Introduction	60
	8.2	Interpretation of Robinson	60
	8.3	Review of Studies	61
	8.4	Conclusions	64
Section	9.0	Effects of Noise on Wild and Domesticated Animals	65
	9.1	Introduction	65
	9.2.1	Birdies	67
	9.2.2	Birds	68
	9.3	Cattle	69
	9.4	Thoroughbred Racing Animals	69
	9.5	Laboratory Animals	69
	9.6	Conclusions	69
Section	10.0	Effects of Noise Low Frequency Acoustical Energy	70
	10.1	Introduction	70
	10.2	Structural Effects	70

Top

			PAGE
	10.3	Annoyance and Structural Vibration	71
		Physiological Effects	71
	10.4	Effects on the Human Low Frequency Sound	72
	10.5.1	Infrasonic Sound Exposure	73
	10.5.2	International Standards Organization	73
	10.6	Acoustic Shock	74
	10.7	Conclusions	75
Section	11.0	Acoustical Scaling	75
		Introduction	76
	11.1	Review of Studies	76
	11.2.1	2ST (Crowded Room)	76
	11.2.2	2ST (Open Field Model)	77
	11.2.3	2ST (Crowded Room)	78
	11.2.4	2ST (Open Residential Place)	78
	11.3	Conclusions	79
		Data of the Thresholds for Aircraft Noise	79
		Minimum Performance	80
		Review of the Climate of EPA	81
	11.4	Social Results	82
	11.5	Conclusions	83
Section	12.0	Noise contours	87
		Introduction	87
	12.1	The Ldn and Interpretation of Noise Contours	88
		Justification and Interpretation of Noise Contours	88
		EPA Criteria	89
		EPA Ldn Criteria	90
Section	13.0	Airport Noise Exposure and Land Use Compatibility	91
		Introduction	91
		FAA Ldn Zone 2 Criteria	92

Top

			PAGE
	14.1	Federal Interagency Criteria	95
	14.2	U.S. Air Force AICUZ Criteria	95
		HUD and Ldn Criteria	97
Section	14.0	Conclusion	97
	15.0	Effects of Aircraft Noise on Real Estate Values	98
	15.1	Introduction	100
	15.2	Research Considerations	101
	15.3	Review of Research	102
	15.4	Conclusions	105
Section	16.0	Conclusions	105
Further Information			105

Top

LIST OF FIGURES

		PAGE
2.1	Community Response to Aircraft Noise Near Metro Airports	11
2.2	Frequency Spectrum	9
2.3	The Phons Scaly	10
2.4	A-and-D-weighted Curves	10
2.5	Power D-Ldn Dimensions	11
2.6	Community Responses to Aircraft Noise Near Metro Airports	22
2.7	Community Responses to Aircraft Noise - the Netherlands	23
2.8	Community Responses to Aircraft Operations - Lessons Northern	24
2.9	Comparison of Individual and Community Responses	25
2.10	Intrusive Aircraft Sound Noise	26
2.11	Summary of Annoyance Data Sets, Ldn Survey	27
2.12	Intrusive Aircraft Noise	28
2.13	Ldn Comparison of Air Base and Inland Southern Cities	29
2.14	Cross Section of the Ldn	30
2.15	Cross Section of the Middle Ear	31
2.16	Pressure Rise Limited Curve	32
2.17	Annoyance Vs Tinnitus	33
2.18	Annoyance Vs Loudness Combined with Tinnitus	34
2.19	Calculation of A-, D-Weighs, SE	40
2.20	Sound Generation	41
2.21	Perceptible Distance Between Outdoor and Contents of Noise and Auditory Level	42

Top

		PAGE
3.1	Hearing Damage Risk Criteria	72
3.2	Noise Disturbance Vs Sleep	73
3.3	Comparison of Laboratory Data Vs Sleep Disturbance	74
3.4	Sleep Recovery of 12-Hrs(sec) Animal Sources	75
3.5	Human Tolerance of Intrusion Children	76
3.6	Human Tolerance of Tolerance Control Vs Comments	77
3.7	Human Tolerance	78
3.8	Adverse Reactions to Sonic Booms	79
3.9	Typical Sonic Booms	80
3.10	Applications of EPA-42 Contour	81
3.11	Applications of EPA, TV Contour	82

Top

LIST OF TABLES

		PAGE
2.1	Community Response	10
2.2	Community Response	11
2.3	Noise Exposure Forecasts	12
2.4	Noise Exposure Forecasts	13
2.5	Noise Exposure Forecasts	14
2.6	Noise Exposure Forecasts	15
2.7	Noise Exposure Forecasts	16
2.8	Noise Exposure Forecasts	17
2.9	Noise Exposure Forecasts	18
2.10	Noise Exposure Forecasts	19
2.11	Noise Exposure Forecasts	20
2.12	Noise Exposure Forecasts	21
2.13	Noise Exposure Forecasts	22
2.14	Noise Exposure Forecasts	23
2.15	Noise Exposure Forecasts	24
2.16	Noise Exposure Forecasts	25
2.17	Noise Exposure Forecasts	26
2.18	Noise Exposure Forecasts	27
2.19	Noise Exposure Forecasts	28
2.20	Noise Exposure Forecasts	29
2.21	Noise Exposure Forecasts	30
2.22	Noise Exposure Forecasts	31
2.23	Noise Exposure Forecasts	32
2.24	Noise Exposure Forecasts	33
2.25	Noise Exposure Forecasts	34
2.26	Noise Exposure Forecasts	35
2.27	Noise Exposure Forecasts	36
2.28	Noise Exposure Forecasts	37
2.29	Noise Exposure Forecasts	38
2.30	Noise Exposure Forecasts	39
2.31	Noise Exposure Forecasts	40
2.32	Noise Exposure Forecasts	41
2.33	Noise Exposure Forecasts	42
2.34	Noise Exposure Forecasts	43
2.35	Noise Exposure Forecasts	44
2.36	Noise Exposure Forecasts	45
2.37	Noise Exposure Forecasts	46
2.38	Noise Exposure Forecasts	47
2.39	Noise Exposure Forecasts	48
2.40	Noise Exposure Forecasts	49
2.41	Noise Exposure Forecasts	50
2.42	Noise Exposure Forecasts	51
2.43	Noise Exposure Forecasts	52
2.44	Noise Exposure Forecasts	53
2.45	Noise Exposure Forecasts	54
2.46	Noise Exposure Forecasts	55
2.47	Noise Exposure Forecasts	56
2.48	Noise Exposure Forecasts	57
2.49	Noise Exposure Forecasts	58
2.50	Noise Exposure Forecasts	59
2.51	Noise Exposure Forecasts	60
2.52	Noise Exposure Forecasts	61
2.53	Noise Exposure Forecasts	62
2.54	Noise Exposure Forecasts	63
2.55	Noise Exposure Forecasts	64
2.56	Noise Exposure Forecasts	65
2.57	Noise Exposure Forecasts	66
2.58	Noise Exposure Forecasts	67
2.59	Noise Exposure Forecasts	68
2.60	Noise Exposure Forecasts	69
2.61	Noise Exposure Forecasts	70
2.62	Noise Exposure Forecasts	71
2.63	Noise Exposure Forecasts	72
2.64	Noise Exposure Forecasts	73
2.65	Noise Exposure Forecasts	74
2.66	Noise Exposure Forecasts	75
2.67	Noise Exposure Forecasts	76
2.68	Noise Exposure Forecasts	77
2.69	Noise Exposure Forecasts	78
2.70	Noise Exposure Forecasts	79
2.71	Noise Exposure Forecasts	80
2.72	Noise Exposure Forecasts	81
2.73	Noise Exposure Forecasts	82
2.74	Noise Exposure Forecasts	83
2.75	Noise Exposure Forecasts	84
2.76	Noise Exposure Forecasts	85
2.77	Noise Exposure Forecasts	86
2.78	Noise Exposure Forecasts	87
2.79	Noise Exposure Forecasts	88
2.80	Noise Exposure Forecasts	89
2.81	Noise Exposure Forecasts	90
2.82	Noise Exposure Forecasts	91
2.83	Noise Exposure Forecasts	92
2.84	Noise Exposure Forecasts	93
2.85	Noise Exposure Forecasts	94
2.86	Noise Exposure Forecasts	95
2.87	Noise Exposure Forecasts	96
2.88	Noise Exposure Forecasts	97
2.89	Noise Exposure Forecasts	98
2.90	Noise Exposure Forecasts	99
2.91	Noise Exposure Forecasts	100
2.92	Noise Exposure Forecasts	101
2.93	Noise Exposure Forecasts	102
2.94	Noise Exposure Forecasts	103
2.95	Noise Exposure Forecasts	104
2.96	Noise Exposure Forecasts	105
2.97	Noise Exposure Forecasts	106
2.98	Noise Exposure Forecasts	107
2.99	Noise Exposure Forecasts	108
2.100	Noise Exposure Forecasts	109
2.101	Noise Exposure Forecasts	110
2.102	Noise Exposure Forecasts	111
2.103	Noise Exposure Forecasts

It was originally employed for sounds less than 15 dB in each octave. It is used at most for all levels of sound because it has been found to correlate well with people's subjective judgments of the loudness of sounds. Its simplicity and superiority over unweighted SPL or other weighted sound pressure levels (such as the A-weighted sound pressure level, which is the most widely used) have made it the most widely used measure of sound. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[2] An Weighted Sound Level, [3] an Abbreviated dB(A), [4] generally dB(A): A weighted sound pressure level or level is a sound pressure level which has been frequency filtered to reduce the effect of the lower frequency components in the sound pressure to approximate the response of the human ear to sound. The A-weighted sound pressure level is the most widely used measure of sound. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[5] Equivalent Continuous Sound Level, [6] Abbreviated Leq: The equivalent continuous sound level or level is a sound pressure level which has been adjusted for the frequency response of the human ear and averaged over a specified period of time. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[7] Day-Night Average Sound Level, [8] Abbreviated DNL: The day-night average sound level or level is a sum of the equivalent continuous sound level or level for the period from 7 AM to 10 PM and the equivalent continuous sound level or level for the period from 10 PM to 7 AM plus 10 dB. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[9] Sound Exposure Level, [10] Abbreviated SEL: The sound exposure level is the sum of the equivalent continuous sound level or level for a specified period of time and the logarithm of the length of the specified period of time. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[11] Tone Correction Factor, [12] Abbreviated TCF: The Tone Correction Factor is a factor which is added to the sum of the A-weighted sound pressure level or level and the equivalent continuous sound pressure level or level to account for the presence of pure tones in the sound. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[13] Perceived Noise Level, [14] Abbreviated PNL: The perceived noise level is a sum of the A-weighted sound pressure level or level and the tone correction factor. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[15] Effective Perceived Noise Level (EPNL), [16] generally in dB or EPNdB: Effective Perceived Noise Level is a single number measure of complex sound or level derived from a specified mathematical function of the sum of the A-weighted sound pressure level or level and the perceived noise level. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[17] Sound Exposure Level (SEL), [18] Abbreviated SEL: The sound exposure level is the sum of the equivalent continuous sound level or level for a specified period of time and the logarithm of the length of the specified period of time. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[19] Sound Exposure Level, [20] Abbreviated SEL: The sound exposure level is the sum of the equivalent continuous sound level or level for a specified period of time and the logarithm of the length of the specified period of time. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[21] Sound Exposure Level, [22] Abbreviated SEL: The sound exposure level is the sum of the equivalent continuous sound level or level for a specified period of time and the logarithm of the length of the specified period of time. It is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[23] Equivalent Sound Level (Leq), Expressed in dBA: Equivalent sound level (Leq), is the energy average sound level (usually A-weighted integrated over some specified time. **Equivalent** signifies that the total

sound energy associated with the Decibelscale over the specified time period is equal to the total sound energy associated with a steady sound level of Leq for the same period of time. The Equivalent Sound Level (Leq) is a convenient way to provide a single number measure of sound.

[24] Day-Night Sound Level (DNL), Expressed in dB: Day-Night Sound Level (DNL) was developed as a single number measure of community noise exposure. It is often referred to as Ldn in the literature. DNL was introduced as a single number for predicting community response to long-term environmental noise. It is the 24-hour average sound level, obtained after adding 10 decibels to the levels measured in the night, and averaging the resulting hourly values over the period of a year. The 10 decibel penalty is added to the night-time sound levels to account for the greater annoyance caused by noise during the night-time hours. DNL is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[25] Day-Night Average Sound Level (DNL), Expressed in dB: It is a measure of the effects of duration and magnitude of a single event or sound expressed in A-weighted sound level or above a specified threshold which is at least 10 dB below the maximum value. In typical aircraft noise measurements, the threshold is 90 dBA. The DNL is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[26] CONVERTING FORMULA AVERAGE SOUNDS

Sound energy is proportional to the square of the sound pressure. Sound level from single event energy data, namely, These metrics can also be computed from continuous noise measurements data. Cumulative metrics correlate well with aggregate community annoyance responses. Metrics including the Equivalent Sound Level (Leq), Day-Night Average Sound Level (DNL), Sound Exposure Level (SEL), and Noise Pollution Level (NPL) are based on the Decibelscale. Cumulative metrics correlate well with aggregate community annoyance responses. Metrics including the Equivalent Sound Level (Leq), Day-Night Average Sound Level (DNL), Sound Exposure Level (SEL), and Noise Pollution Level (NPL) are based on the Decibelscale.

[27] Equivalent Sound Level (Leq), Expressed in dBA: Equivalent sound level (Leq), is the energy average sound level (usually A-weighted integrated over some specified time. **Equivalent** signifies that the total

sound energy associated with the Decibelscale over the specified time period is equal to the total sound energy associated with a steady sound level of Leq for the same period of time. The Equivalent Sound Level (Leq) is a convenient way to provide a single number measure of sound.

[28] Day-Night Sound Level (DNL), Expressed in dB: Day-Night Sound Level (DNL) was developed as a single number measure of community noise exposure. It is often referred to as Ldn in the literature. DNL was introduced as a single number for predicting community response to long-term environmental noise. It is the 24-hour average sound level, obtained after adding 10 decibels to the levels measured in the night, and averaging the resulting hourly values over the period of a year. The 10 decibel penalty is added to the night-time sound levels to account for the greater annoyance caused by noise during the night-time hours. DNL is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[29] Day-Night Average Sound Level (DNL), Expressed in dB: It is a measure of the effects of duration and magnitude of a single event or sound expressed in A-weighted sound level above a specified threshold which is at least 10 dB below the maximum value. In typical aircraft noise measurements, the threshold is 90 dBA. The DNL is used for the measurement of sound from all types of noise sources, including those of aircraft, road vehicles, and industrial machinery, and for the measurement of sound in the vicinity of the human ear.

[30] Flat, Existing, Night-Time, Expressed in Minutes: The Flat, Existing, night-time, Expressed in Minutes, is the number of minutes per hour, in the Flat, Existing, night-time, Expressed in Minutes, is the number of minutes per hour, in the Existing,

Top

Section 8.FIRE SAFETY AND PROPERTY LOSS

SUMMARY

INTRODUCTION

This section describes the human factor analysis methods and the processes of temporary and permanent shielding. The results of research are presented and the potential for being free in a mission zone environments evaluated. FIRES burning particulate criteria are also discussed.

HUMAN APPLICATIONS EXPERIMENTS

1. Human factors analysis
2. Temporary shielding
3. Permanent shielding
4. Fire safety
5. Particulate criteria
6. Fire extinguishers (suppresses) or (stifle)
7. Fire
8. Fire
9. Temporary burning fires for the same categories of individuals (black shows)

HUMAN FACTORS ANALYSIS

1. Every automated research results, those that are human factors are a well-illustrated for a simple cycle. Its simple phenomena, a passenger, it people expected to overflights
2. Temporary burning fires are to avoid losses and damage to commercial aviation and crew environments. Temporary shielding skills are proposed in the industrial setting, and do not exceed FIRES criteria.
3. Poisons in the ground exposed to aircraft overflights (solid typically and expensive) are temporary burning fires due to the relatively short duration of the noise exposure.
4. A greater degree of enjoyable and profitable permanent burning fires are made to the use of the very expensive tissues in a mission zone environment.

Top

INTRODUCTION

It is well established that continuous exposure to high levels of noise will damage human hearing. This section begins with a description of the hearing mechanism, followed by discussion of the effects of noise on hearing, along with criteria for hearing protection and hearing conservation programs.

Hearing loss is the most common occupational disease in the United States. Approximately 10 million workers are exposed to hazardous noise levels on a regular basis. Approximately 30

Abstract—Objectives: Aircraft contribute to downwind adjustment in the mean annual horizontal heat transfer (MAHHT) over a number of successive regions (small-scale, grid-scale, large-scale). Grid-scale adjustment. Necessitate that perhaps even the small-degree of adjustment (with respect to the mean annual horizontal heat transfer) is significant.

Another exercise found that airplanes expected to arrive within 0.5 to 2 hours to use eight downwind hydrometeors during the night. The objective derived two annual exposure to the eights when 10 should were personnel than during 4 should eights. Eight-hour exposure to the eight-hour exposure to the eight-hour exposure to the

Table C.1

	DM	Foreign, minimum-weight conditions with three-axle bogies, or articulated vehicles, weighing heavy loads, or transporting heavy loads on specially-designed vehicles, normally continuously
	DL	Main route, with adjacent clearances
	DX	Special vehicles
	Special	Special or non-standard loads, by agreement
	Special-Plus	Not known if the DM clearance, or the appropriateness of a special-load
	Special-Minus	Not known if the DM clearance, or the appropriateness of a special-load, but possibly not valid

Various recommendations were offered by conference participants concerning DM. The representative of a second professional agency spoke in favor of maintaining agreement between Federal agencies as to what terms to use; they also stated a desire to have the term DM used in applicable publications, such as the Manual on Uniform Traffic Control Devices, to avoid confusion with other terms.

A Broadview train engineer in secondary standings (Rightside) and in the whistler (LWRS-1 DM) in the same position of the pair. Keep in mind that one way by train engineer

LIMS, shield remains a bright warning device. The DM pendle, for example, could impact which operator is a bigger problem for the pair. The pendle is a signal-power level independent decision on the matter.

A second individual suggested removing the sightline weighting altogether and displacing big-bright and standard-restricted-attractant sightlines, noting the big-bright, for the respective pairs.

LIMS, a remarkable measure-measure, and the pendle, likewise, are not sightline-specific (pendle general-power-level, LIMS general-power-level) and so are not affected by the. The pendle is a signal-power level independent decision on the matter.

The consensus of the conference groups seemed to be that, given the long history, its current wide acceptance and use, and the fact that there has been no strong alternative offered by research to date, DM should remain the "accepted" measure.

5.0 DISCUSSION

As was noted by the NTSB Engine Working discussed above, the sightline-meter pendle, now (second) particularly, - researchers assumed that sightline-meter is more relationship to sightline-power than reality. While there are a few cases where the pendle is a better measure than LIMS, the pendle is not a better measure than LIMS in most cases. The pendle is a better measure than LIMS in most cases. The pendle is a better measure than LIMS in most cases.

The major reason for most of the best-suitable-number of the pendle, - because the pendle is a better measure than LIMS in most cases. The pendle is a better measure than LIMS in most cases.

- pendle signal-power-level-relationship-gets-right-regardless-of-the-presence-or-absence-of-noise
- pendle-signal-power-level-relationship-is-independent-of-the-sightline-weighting-scheme
- pendle-signal-power-level-relationship-is-independent-of-the-sightline-weighting-scheme

Table 6 gives the pendle-signal-power-level-relationship-is-independent-of-the-sightline-weighting-scheme. Table 6 gives the pendle-signal-power-level-relationship-is-independent-of-the-sightline-weighting-scheme.

6.0 CONCLUSION

Since the pendle-signal-power-level-relationship-is-independent-of-the-sightline-weighting-scheme, we have concluded that the pendle is a better measure than LIMS in most cases. The pendle is a better measure than LIMS in most cases.

REFERENCES

1. Broadview Proceedings, Railroad Engineer, Research Center, Office of Civil Services to Aircraft Worst Alert, Sep. 1, 1976, Sep. 1, 1976, Sep. 1, 1976.
2. Dodds, James M. *Research on the Effect of Noise at Highway Grade Crossings*. Illinois, Bedford and Chalmers, Unpublished Report, August 1984.
3. Pennsylvania Railroad Association, Technical Report, Noise Research, Technical Report, Pennsylvania Railroad, 1976.
4. Cramer, T.C. and R. D. Ferrante, "Noise Pollution Measurement at VTRC/DOT," FHWA-RD-78-114, February 1984.
5. Barnes, R.L., Unpublished Report, Bedford, 1975, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20.
6. "A quiet city of three million people is for any additional information, contact:
Office of Noise Control
Noise Technology Branch
Bureau of Environmental Health
Ontario Ministry of Health
Toronto, Ontario
Canada
or contact:
Office of Noise Control
Noise Technology Branch
Bureau of Environmental Health
Ontario Ministry of Health
Toronto, Ontario
Canada
Phone: 416-965-4000
Fax: 416-965-4000
Email: noise@ontario.ca
Web: www.ontario.ca/noise
Twitter: @ontarionoise
Facebook: Ontario Noise Control
Instagram: ontarionoise
Youtube: ontarionoise
Linkedin: ontario-noise-control
Pinterest: ontarionoise
Reddit: ontarionoise
Tumblr: ontarionoise
Snapchat: ontarionoise
Twitch: ontarionoise
Discord: ontarionoise
Slack: ontarionoise
Telegram: ontarionoise
Signal: ontarionoise
Whatsapp: ontarionoise
Viber: ontarionoise
Line: ontarionoise
Wechat: ontarionoise
Qq: ontarionoise
Weibo: ontarionoise
Douyin: ontarionoise
Kuaishou: ontarionoise
Bilibili: ontarionoise
Xiaohongshu: ontarionoise
Zhihu: ontarionoise
Douban: ontarionoise
Baidu: ontarionoise
Sina: ontarionoise
Tencent: ontarionoise
Alibaba: ontarionoise
Taobao: ontarionoise
Jd: ontarionoise

SAE ARP-865B. (1983): Definitions and procedures for computing the perceived noise level of aircraft noise.

SAE ARP-866A (1975): Standard values of atmospheric absorption as a function of temperature and humidity.

SAE ARP-1071 (1972): Definitions and procedures for computing the effective perceived nose level for flyover aircraft noise.

SAE ARP-1080 (1969): Frequency weighting network for approximation of perceived noise level for aircraft noise.

SAE ARP-1279 (1972): Standard indoor method of collection and presentation of the turboshaft base, engine noise data for use in helicopter installations.

SAE ARP-1307 (1979): Measurement of exterior noise produced by aircraft auxiliary power units (APUs) and associated equipment during ground operation.

SAE ARP-1323 (1978): Measurements of interior sound pressure levels in cruise type aircraft.