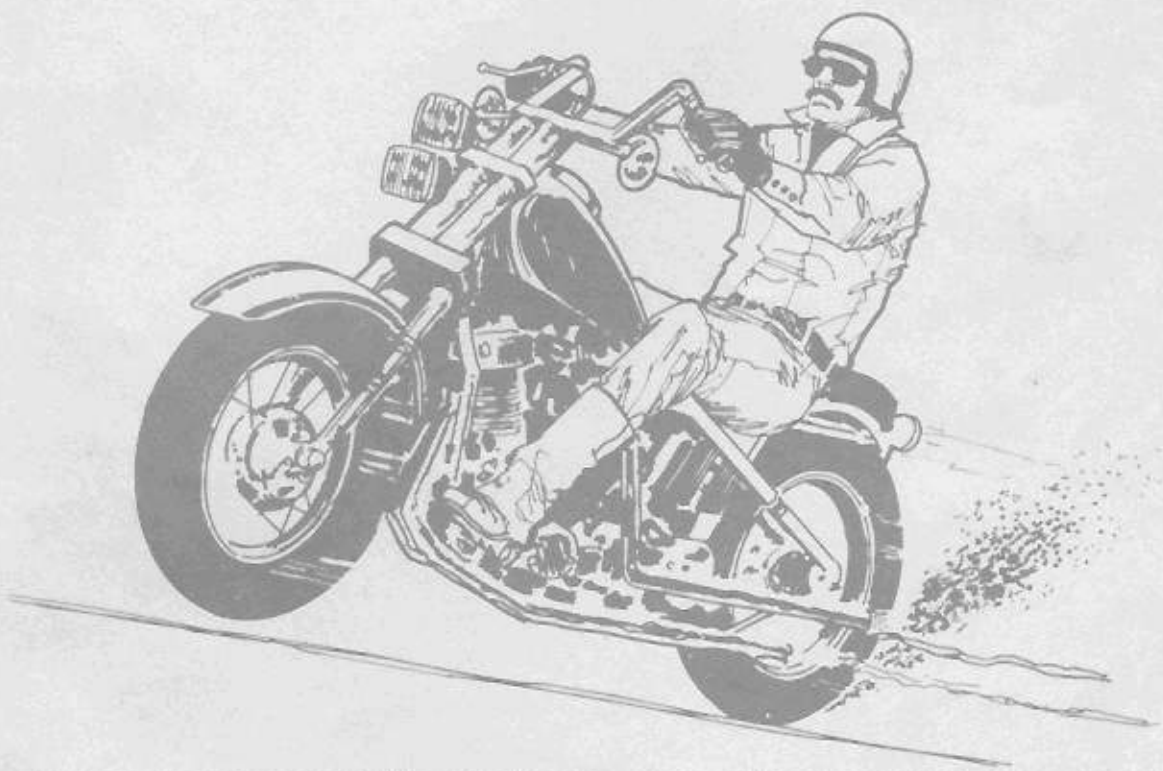
Buy Quiet

PRODUCT INFORMATION SUPPLEMENT No.5
PRODUCT NOISE INFORMATION SERIES
JUNE, 1980

INFORMATION ON NOISE LEVELS, NOISE MEASUREMENT METHODS AND "BUY QUIET" EXPERIENCES ASSOCIATED WITH MOTORCYCLES



AN INFORMATION SUPPLEMENT FOR GOVERNMENTAL PURCHASING AGENTS IN DEVELOPING "BUY QUIET" PROGRAMS

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Preface

This packet contains information for the use of government purchasing officers and other officials in purchasing quieter Motorcycles. It is a companion document to the Guide to Purchasing Quieter Products and Services[1] which describes in general terms how noise considerations can be incorporated into purchasing decisions. Together, these documents and others available through the Quiet Product Data Bank maintained by the National Institute of Governmental Purchasing (NIGP) can help you develop a "Buy Quiet" Program for your government.

1. Issued by NIGP, May 1980.

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INTRODUCTION

The "Buy Quiet" Program is a new concept in which governments cooperate with each other to buy quiet models of equipment. It is being extended with the help of the National Institute of Governmental Purchasing, the National League of Cities, other national organizations and various local and state agencies. This type of local noise control:

- costs very little;
- requires little additional effort;
- begins the community quieting process;
- establishes market pressures.

Surveys have shown that noise is the most frequently identified undesirable neighborhood condition in urban areas. Scientists and the medical profession now tell us that noise is no longer a mere irritant, but that in fact it has a very adverse impact on our health and well being. You as a purchasing officer can reduce noise in your community by purchasing quieter products. State and local governments and large private organizations spend billions of dollars each year on equipment such as compactors, chain saws, typewriters, lawnmowers, trucks, motorcycles, pneumatic drills, and buses. If these governments can become more selective so as to purchase quieter products, cities and neighborhoods will be quieter.

Section 1. DESCRIPTION OF THE PRODUCT

For the purposes of this supplement there are two broad categories of motorcycles: street motorcycles and off-road motorcycles.

STREET MOTORCYCLES

"Street" motorcycles are defined as all motorcycles which are designed and marketed for on-road operation. This category includes street and highway motorcycles, on-road/off-road combination motorcycles, Enduro motorcycles intended for limited street operation, minicycles intended for street operation, and motor-driven cycles.

This street motorcycle category encompasses vehicles having the following charcteristics:

1. Approximately 50 to 100 c.c. engines, developing from 1 to 100 horsepower.
2. Two-stroke, four-stroke, and rotary engines.
3. One to six cylinders.
4. Liquid, fan and air cooling systems.
5. Two and three wheels.
6. Light and heavy weight.
7. Shaft and chain drive.
8. Manual and hydraulic torque converter automatic transmission.

OFF ROAD MOTORCYCLES

"Off-road" motorcycles are defined as all motorcycles which are designed and marketed for off-road recreational and off-road competition use, with the exception of motorcycles designed and marketed solely for use in closed-course competition events.

This off-road category encompasses vehicles having the following characteristics:

1. 50 to 500 c.c. engines.
2. Two-stroke and four-stroke engines.
3. Single cylinder.
4. Air cooled.
5. Two and three wheels.
6. Light weight.
7. Chain drive.
8. Manual, centrifugal clutch and continuously variable (belt) automatic transmission.

Section 2. NOISE LEVEL OUTPUT INFORMATION

Definitions of Terms

NOISE: Any undesired sound.

SOUND LEVEL METER: An instrument, consisting of a microphone, an amplifier, an output meter, and frequency-weighted networks, that is used for the measurement of sound levels in a specified manner.

DECIBEL: The intensity of a sound often abbreviated dB. The decibel scale was devised to measure the smallest difference in sound which is detectable by the human ear. Its graduations move up not in a simple arithmetic progression but in a multiple progression based on logarithmic calculations. This means that each increase of one decibel represents a much larger change of intensity than might be expected. Because of the logarithmic progression of the decibel scale, an increase of ten decibels, for example, reflects a ten-fold increase in sound energy, but is perceived as being approximately twice as loud. Thus a sound which is measured at 80 dB contains ten times the sound output and is perceived as being twice as loud as a sound that is measured at 70 dB.

dBA: An expression of sound level taking into account the response of the human ear to sound.

Noise level information is given in Table 1. When using it, please note:

1) the noise level range given for commercially available models of the product is for use as a guide only. It is not a definitive statement of noise measurements taken on all models currently available. Lower noise levels, for some models, are likely to be found.

2) when making comparisons among the noise levels of different products, it is very important that a single noise measurement method[1] is used. If this is not adhered to, very different noise levels will result and comparisons which are made may not be meaningful. Thus, in the chart the range of noise levels is expressed using one method from the known ones that are listed, to insure consistency when comparing noise level information. Selection of that particular method in no way constitutes NIGP endorsement of that method.

3) the table implies nothing in terms of product pricing. A quieter product does not necessarily cost more; in many cases, it may be less.

Measurement Procedures

Sound level measurement procedures generally prescribe instrumentation (e.g., the type of sound level meter to be used, other devices required), a description of the test site and measurement zone, a description of equipment operation (e.g. traveling on stationary mode, rpm setting), how measurements are to be made (e.g., setting of sound level meter, height and location of microphones), and general requirements (e.g., such as who should select testing equipment and conduct the tests).

1. See discussion in Section 3.

TABLE 1. MOTORCYCLE
NOISE DATA SUMMARY

MOTORCYCLE TYPE	APPROXIMATE RANGE OF SOUND PRESSURE LEVELS (Using SAE J-331a) AT 50 FT.	NOISE MEASUREMENT METHODS
Street Motorcycles[1]		1) U.S. EPA Motorcycle Noise Measurement Methodology[1]
50cc - 99cc	65 dBA - 82 dBA	2) SAE J-331a[2]
100cc - 169cc	78 dBA - 88 dBA	3) CHP Variation Of J-331a[3]
170cc - 349cc	77 dBA - 97 dBA	4) SAE J-986a[4]
350cc - 749cc	73 dBA - 89 dBA	5) SAE J47[5]
750cc and over	74 dBA - 93 dBA	
Off Road Motorcycles[1]		
50cc - 99cc	75 dBA - 81 dBA	
100cc - 169cc	78 dBA - 100 dBA	
170cc - 349cc	79 dBA - 100 dBA	
350cc - 749cc	88 dBA - 95 dBA	
750cc and over		

1. The U.S. EPA will soon issue maximum levels (using the EPA motorcycle noise measurement methodology) that manufacturers will be required to meet which will lower the upper limits for commercially available motorcycles of each type. The EPA motorcycle noise measurement method is slightly different than SAE 331a.

2. Most commonly used method in U.S. as of 1979;

3. Used by California highway patrol;

4. Used in Canada;

5. Slightly different than SAE J-331a

Section 3. PREPARATION OF THE PRODUCT SPECIFICATION

A good specification for any product will identify minimum performance and design requirements; list the reproducible test methods that may be used to determine compliance with these requirements; allow competitive bidding; permit an equitable contract award at the lowest possible evaluated price.

Therefore, a government seeking to purchase a quieter product should be sure that its specification describes a product that can be bid at a reasonable price by at least two, and preferably, three or more suppliers.

Noise Level Specification

The noise level portion of the product specification should contain the following three elements.

1. A maximum noise level referenced to a single measurement methodology.

2. A verification requirement, and

3. An incentive for offering products quieter than the maximum level established.

Maximum Noise Level

The maximum level should be low enough to disqualify the noisiest models on the market but high enough to insure competition among 2 or more suppliers.

In the absence of a firmly established specification, the buyer is encouraged to contact NIGP for a recommended maximum level based on an updated Table 1.

Including Sound Level Measurement Procedures in the Specifications

A buyer must reference a reproducible sound level measurement procedure whenever it specifies a noise level requirement or any other performance requirement. For example, the noise level requirement in a specification for a quieter motorcycle might say:

> NOISE LEVEL: Noise level shall not exceed — decibels (A Scale) when measured in accordance with the U.S. EPA Motorcycle Noise Methodology.

A copy of the complete specification will be available in the near future from NIGP.

Verifying Compliance With Specifications

There are at least two ways that governments can assure themselves that they have been offered or sold products which conform to specified requirements. One involves laboratory and field testing. The other involves vendor submission of "certified" test data.

In some instances, it may be necessary for the government or its agent (e.g., a commercial laboratory) to actually test items when they are submitted for evaluation or when received after purchase. In most instances, however, it is more practical for the government to ask a vendor to submit, with his bid, an approved third-party's written certification that the vendor's product conforms with a specified requirement. There are hundreds of private sector laboratories which could be approved to perform testing and certification services for manufacturers.

If a buyer must actually test the noise levels of product models offered in response to a "noise-conscious" invitation for bids, he or she should contact the Buy Quiet Program director at the NIGP national office for assistance, who may be able to arrange for essential testing through various cooperative programs.

Section 4. A SUGGESTED METHOD OF CONTRACT AWARD

NIGP has developed an optimal method of contract award which allows a buyer to encourage a bidder to offer a product that is even quieter than required by the specification. In effect, it tells the bidder: "For each decibel[1] that your product is quieter than the loudest product bid (in conformance with the specification), we will subtract a fixed percentage of the average actual bid price from your actual bid price. The difference will be your evaluated bid price."

Evaluated bid prices, rather than actual bid prices, are compared in the selection of the contract recipient. As in Life Cycle Costing, the bidder with the lowest actual bid price may not necessarily be the bidder with the lowest "evaluated" bid price.

To insure against paying an excessive premium for increased quietness, buyers using this optimal method of contract award can state: the purchaser will not pay a contract price more than X percent in total above the average of the actual bid prices.[2] This amount represents the maximum additional amount that the government is willing to pay above the average actual bid price, for each quieter product.

1. Usually (but not always) A scale. A few product methodologies may use the C scale.
2. Not to be confused with the per decibel incentive in the formula.

Formula For Determining

Evaluated Bid Price

The formula for determining the Evaluated Bid Price (EBP) is:

$EBP = P - Y\% \ (P_{AV}) \ (N_N - N)$ where:

EBP = Evaluated Bid Price

P = Actual Bid Price

Y% = The percentage weight designated by the purchasing activity to "reward" the bidder for each decibel that his model is quieter than the noisier model bids.

P_{AV} = Average (actual) bid price of all models bid in response to the IFB

N_N = The noise level (in decibels) of the noisiest model bid in response to the IFB

N = The noise level (in decibels) of the model whose EBP is being determined

Sample Bid Tabulations

In order to illustrate the working of the formula, the bid tabulations for a purchase of quieter product X might look like this:

BIDDERS:

Bidder	Actual Bid Price	Noise Level (dBA)	(EBP) Evaluated Bid Price:
(A) Smith Co.	$145.00	76	$145.00
(B) Robert Co.	$154.00	75	$151.02
(C) Jones Co.	$147.00	72	$135.08
(D) Watkins Co.	$150.00	71	$135.10

Calculation of Evaluated Bid Price (EBP)

Assuming that the Purchasing Activity used a 2% "reward" factor for each decibel of increased quietness, the EBP for each bidder would be determined as follows:

(A) Smith Co.

EBP = $145. - .02 ($149) (76-76)

= $145. - $2.98 (0)

= $145.

Calculation of Evaluated Bid Price (EBP) continued

(B) Roberts Co.
EBP = $154. - .02 ($149) (76-75)
= $154. - $2.98 (1)
= $151.02

(C) Jones Co.
EBP = $147. - .02 ($149) (76-72)
= $147. - $2.98 (4)
= $147. - $11.92
= $135.08

(B) Watkins Co.
EBP = $150. - .02 ($149) (76-71)
= $150. - $2.98 (5)
= $150. - $14.90
= $135.10

Contract Award

Based on an evaluated bid price (EBP) of $135.08, the contract should be awarded to Jones Co. (bidder "C") at its actual bid price of $147 per unit for furnishing quieter product X with a (maximum) noise level of 72 decibels (A Scale).

APPENDIX A

LIST OF MANUFACTURERS

MANUFACTURER	U.S. DISTRIBUTOR
Mr. Hideo Sugiura Managing Director Honda Motor Co., Ltd. 6-27-8, Jingumae, Shibuya-Ku Tokyo, 150, Japan	Mr. C.L. Hale, Assistant Director American Honda Motor Co., Inc. 100 W. Alondra Boulevard Gardena, CA 90247
Mr. Yuhei Chijiiwa General Manager Asaka R&D Center Honda R&D Co., Ltd. 2177, Hizaori Asaka-Shi Saitama, 351, Japan	
Mr. Tadao Kobayashi Staff Engineer Center for Environmental and Safety Activities Honda Motor Co., Ltd. 1-4-1, Chuo, Wako-Shi Saitama, 351, Japan	
Mr. Itaru Aono, Director Kawasaki Heavy Industries, Ltd. 1-1, Kawasaki-Cho. Akashi-City Hyogo-Pref. Japan	Mr. Roger Hagie Kawasaki Motors Corporation, USA 2009 E. Edinger St. Santa Ana, CA 92705
Mr. Seiichi Inagawa, Director Suzuki Motor Co., Ltd. P.O. Box Hamamatsu-NISHI 432-91 Hamamatsu Japan	Mr. John B. Walsh, Supervisor Sound Level Research Safety and Legislative Dept. US Suzuki Motor Corp. Santa Fe Springs, CA 90670
Mr. Takehiko Hasegawa, Director Yamaha Motor Co., Ltd. 2500 Shingai Iwata-Shi Shizuoka-Ken P.O. Box 1 Iwata Japan	Mr. Kenneth K. Ito, Manager Governmental Affairs Dept. Engineering Division Yamaha Motor Corporation, USA P.O. Box 6620 6600 Orangethorpe Buena Park, CA 90620

LIST OF MANUFACTURERS

MANUFACTURER	U.S. DISTRIBUTOR
Mr. Bernd Anderson BMW Motorrad GmbH Postfach 40 03 60 8000 Munchen 40 West Germany	Mr. Karl-Heinz Ziwica Manager Safety Engineering BMW of North America Montvale, NJ 07645 Butler & Smith Walnut St. & Hudson Ave. Norwood, NJ 07648
Mr. George Riess Oberingieur Nurnberger Hurecules-Werke GmbH Nopitschasse 70 Postfach 1805 8500 Nurnberg West Germany	Sachs Motor Corp. of USA 909 Crocker Road Westlake, OH 44145
Ingenieur Hanns Hilber Chefkonstrukteur Kreidler Werke GmbH Fahrzeugwerke Stuttgart-Zuffenhausen West Germany	Kreidler Import Corp. 2132 Cathedral Ave., NW Washington, DC 20008
Mr. A. Morawetz Chief Engineer KTM-Motorfahrzeugbau Kronreif & Trunkenpolz 5230 Mattighofen Austria	KTM Imports, USA 9825 Mason Avenue Chatsworth, CA 91311 Mr. Don Rosine, Manager KTM America, Inc. 1906 Broadway Lorain, OH 44052
(Maico)	Maico Motorcycles, Inc. 109 Electric Avenue Lewistown, PA 17044
Dipl.-Ing. Dr. tech. Peter E. Resele Chief Engineer, R&D Moped/Motorcycle Division Steyr-Daimler-Puch-AG Werke Graz A-8011 Graz Austria	Steyr-Daimler-Puch of America Corporation Greenwich Office Park Box 7777 Greenwich, CT 06830

LIST OF MANUFACTURERS

MANUFACTURER	U.S. DISTRIBUTOR
	Mr. Leonard A. Fink Steyr-Daimler-Puch Suite 880 1700 Pennsylvania Ave. NW Washington, DC 20006
Dipl.-Ing. Karl-Heinz Menzl Leiter der Technichen Entwicklung Zundapp-Werke GmbH Anzinger Str. 1-3 8000 Munchen 8 West Germany	None
Mr. J. Chalamanch CEMOTO SA P.O. Box 31 San Andrian de Besos Barcelona, Spain	Mr. John Grace Bultaco International, Ltd. 5447 Greenwich Road Virginia Beach, VA 23462
Mr. J. Canellas Monset Executive Director Montesa Motorcycles Av. Virgen de la Paloma, 21 Esplugues de Llobregat Barcelona, Spain	Viva Distributing Co. 10625 Vanowen Burbank, CA 91505
Mr. Eduardo Giro Barella General Manager Maquinara Cinematografica SA Poligona Industrial - Zona Franca Calle B - Sector B Barcelona - 4, Spain	OSSA Sales Corporation 2910 Cambell Avenue Schenectady, NY 12301
Ing. Benso Marelli G.I. Agrati-Garelli S.p.A. 22068 Monticello Brianza (Co) Italy	American Garelli 1211 Cadsden St. Columbia, SC 29201
Mr. Guido Ranalli F'lli Benelli, S.p.A. Viale Mamili, 22 Pesaro, Italy	Mr. Lawrence Wise Cosmopolitan Motors, Inc. Jacksonville and Meadowbrook Rd. Hatboro, PA 19040
Ing. Enrico Santoro Ducati Meccanica S.p.A. Via A.C. Ducati, 3-40100 Bologna (Borgo Panigale) Italy	

LIST OF MANUFACTURERS

MANUFACTURER	U.S. DISTRIBUTOR
Mr. Giovanni Floci Fantic Motor S.p.A. Via Statale, 1-22061 Barzago (Co.) Italy	None
Dr. Ing. A. Columbo Innocenti Via Pitteri 81 20100 Milano, Italy	None
(Italjet)	Italjet USA 7471 Greenbush Avenue North Hollywood, CA 91605
(Lambretta)	International Sportcycles, Inc. 4000 Kennedy Boulevard Union City, NJ 07087
(Laverda)	Yankee Corporation P.O. Box 36 Schenectady, NY 12301
M.d.L. Umberto Todero Capo Servizio Disegno Prodotti SEIMM - Moto Guzzi Via E.V. Parodi 57,22054 Mandello Lario (Como) Italy	Mr. Michel Berliner Berliner Motor Corp. Railroad St. and Plant Rd. Hasbrouck Heights, NJ 07604 2910 Cambell Avenue
Mr. Paolo Zaghi Moto Morini Via A. Bergami, 7-40133 Bologna, Italy	Mr. Herman Baver Herdan Corp. Route 61 Port Clinton, PA 19549
Mr. Tiziano Matteini Motori Minarelli Via S. Vitalino, 19-40012 Calderara di Reno (Bologna) Italy	None
Ing. Giuseppe Bocchi M.V. Agusta S.p.A. Viale Adriatico, 50-21010 Verghera (Varese) Italy	Garyville Corporation 200 Clearbrook Road Elmsford, NY 10523

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MANUFACTURER	U.S. DISTRIBUTOR
Ing. Roberto Castelli Off. Mecc. Lafranconi S.p.A. via C. Baltisti, 19-22054 Mandello Lario (Como) Italy	None
Ing. Giovanni Batoni Piagglo & C.S.p.A. 56025 Pontedera (Pisa) Italy	Mr. Bruno Poratti Vespa of American Corp. 322 E. Grand Avenue So. San Francisco, CA 94080
Mr. W.B. Colqhoun Managing Director NVT Motorcycles, Ltd. Lynn Lane, Shenstone Lichfield, West Midlands WS14 OEA England	Mr. Roger Stange NVT America, Inc. 1261 S. State College Pkwy. Anaheim, CA 92806
Reliant Motor Company, Ltd. Tamworth Staffordshire B77 1HN England	None
(Rickman)	Target Products (see exhaust system manufacturers)
(Triumph Motorcycles)	Ms. Brenda Price Triumph Motorcycles America, Inc. P.O. Box 1060 Placentia, CA 92670
Mr. Rubin Helmin Mr. Tommy Malm Engine Product Division Husqvarna A B Huskvarna, Sweden S-56101	Mr. Nils-Arne Nilsson Husqvarna Motorcycle Co., Inc. 4935 Mercury Street San Diego, CA 92111
Mr. David Price Mr. Robert Fisher Bombardier, Ltd./Can-Am Valcourt, Quebec Canada	Mr. Warren Daoust President Bombardier Corporation Can-Am Division 4505 W. Superior Duluth, MN 55806

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MANUFACTURER	U.S. DISTRIBUTOR
(CCM)	CCM Imports America, Inc. 4452 West Idyl Dell Road McHenry, IL 60050
(MZ)	East Europe Import/Export 440 Park Avenue South New York, NY 10016
(JAWA/CZ)	American Jawa, Ltd. 185 Express Street Plainview, Long Island, NY 11803
(PANTHER)	Kowasho International, Inc. 1543 West Olympic Boulevard Los Angeles, CA 90015
(Gemini)	Fun Center Distributors Route 2, Box 68 BD Ozark, MO 65721
(Carabela)	Carabela Motorcycle Corp. 781 Factory Road Xenia, OH 45385
(Tomos)	United Trade Representatives 1459 West Evans Florence, SC 29503
(Velosolex)	Mr. Sid Schwartz Velosolex America, Inc. 86 Orchard Street Hackensack, NJ 07601
Mr. W. Thomas York President AMF Incorporated World Headquarters 777 Westchester Ave. White Plains, NY 10604	Mr. Roger Bascom Harley-Davidson Motor Company, Inc. 3700 West Juneau Ave. Milwaukee, WI 53201 Mr. Laimonis T. Embrekts Director, Environmental Control and Energy Resource Planning AMF, Incorporated 777 Westchester Avenue White Plains, NY 10640

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MANUFACTURER	U.S. DISTRIBUTOR
Mr. Mark Hamilton Rokon, Inc. 160 Emerald Street Keene, NH 03431	
Mr. Don Jones AMEX Apache Ltd. 20872 Currier Road Walnut, CA 91789	
Arco E-Z Rider Alexander-Reynolds 123 South Newman Street Hackensack, NJ 07601	
Mr. Jim Hoverson President Chapparal Motorcycles Imex, Inc. P.O. Box 645 Highway 210 East Brainerd, MN 56401	
The Charger Auranthetic Corp. 828 No. Lake Street Burbank, CA 91502	
Mr. Fred Rolloff President Cheetah Motorcycles Rec. Technology Inc. 1000 South Fifth Milwaukee, WI 53204	
Commuter Ind. P.O. Box 309 Cascade, IA 52033	
Dragon Fly Motorcycles Quasar P.O. Box 131 Sterling, VA 22170	
Eagle Motorcycles Galaxy Wholesale 12811 Main Street Garden Grove, CA 92640	

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MANUFACTURER	U.S. DISTRIBUTOR
Explorer International Owosso, MI 48867	
Flandiria Motorcycles Pan Commercial 108 Grove Street Worcerster, MA 01605	
Mr. Scott W. Grafft Fox Corporation 1111 West Racine St. Janesville, WI 54545	
Mr. Ken Fox Gem Products 496 E. St. Charles Rd. Carol Stream, IL 60187	
Mr. Karl Heald President Heald, Incorporated Box 1148 Benton Harbor, MI 49022	
Holder Motorcycles Westam Corporation P.O. Box 15971 Salt Lake City, UT 84115	
HPE Muskin 225 Acacia Street Colton, CA 92324	
Husky Dunecycle Corp. 266 Pacific Park Drive Whittier, CA 90601	
Toyoda America, Inc. KAMI 13924 Bettencourt St. Cerritos, CA 90701	
Mr. L.H. Shuck Lorenco International Box 1055 Danville, IL 61832	

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MANUFACTURER	U.S. DISTRIBUTOR
Motion Development Inc. 101 S. Main Street Almont, MI 48003	
Nero Equipment, Inc. 1370 County Road 8 Box C-51 Canadaigua, NY 14424	
MTD Products 5389 W. 130th St. Cleveland, OH 44111	
Number One Motorcycles Track & Trail Motors 3845 Ste. Catherine St. Montreal, Quebec Canada	
Otis Elevator Company Material Handling Division 8000 Baker Avenue Cleveland, OH 44102	
Mr. R.H. Lincoln Outboard Marine Corp. P.O. Box 663 Milwaukee, WI 53201	
PABATCO P.O. Box 327 Athena, OR 97813	
Pacesetter Enterprise Highway 151 Cascade, IA 52033	
Power Dyne Vehicles Inc. 100 Jenckes Hill Road Lincoln, RI 02865	
Promark Products of Ohio, Inc. P.O. Box 738 15 Franklin Street Norwalk, OH 44857	

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MANUFACTURER	U.S. DISTRIBUTOR
Simplex Manufacturing 4000 Toulouse Street New Orleans, LA 70119	
Stihl Oil Inc./Malaguti Sayner, WI 54560	
Suitcase Cycle 3013 Airport Avenue Santa Monica, CA 90405	
Taylor-Dunn 2114 West Ball Street Anaheim, CA 92804	
Tri Rod Motorcycles BGW Industries, Inc. 150 Distl Avenue Mansfield, OH 44903	
Mr. M.R. Bader Westcoaster Co. Box 8600 Stockton, CA 95204	
Mr. Mark Enochs Xenoah Company 24144 Sumac Drive Golden, CO 80401	

APPENDIX B

Governments Known to Have Had Buy Quiet Experiences Associated With Motorcycles

The Buy Quiet concept is new and the program is just starting. It should not be surprising, therefore, that the NIGP Data Bank, as yet, has no experiences to report for these products. When experiences become known to us, the governments will be listed in this section.

June, 1980

APPENDIX C

Sources of Additional Information

Information on any aspect of the Buy Quiet Program is available from:

Director
Buy Quiet Program
National Institute of
Governmental Purchasing, Inc.
1001 Connecticut Avenue, N.W.
Suite 922
Washington, DC 20036
Tel: 202/331-1357

For additional information on technical and programmatic matters relating to product noise, you may wish to contact your local or state noise control official.