

1

Appendix N – Screener Survey

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Note: This is a comprehensive list of all possible screens that respondents might see. For clarity, the skip logic instructions are excluded. For certain responses, some screens may not be logical and would not appear in the web survey.

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1 Thank you for participating in this NASA-sponsored study about aircraft noise. In addition to
2 space exploration, NASA also conducts research on aircraft. To determine who in your
3 household is eligible to participate in this study, please click the 'next' button at the bottom of
4 this page.

5
6
7
8
9
10 *Paperwork Reduction Act Statement:*

11 *This information collection meets the requirements of 44 U.S.C 3507, as amended by section 2 of*
12 *the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we*
13 *display a valid Office of Management and Budget control number. The OMB control number for*
14 *this information collection is 2700-xxxx and it expires on xx/xx/xxxx. We estimate that it will*
15 *take about xx minutes to read the instructions, gather the facts, and answer the questions. You*
16 *may send comments on our time estimate above to [@nasa.gov](#). Send only*
17 *comments relating to our time estimate to this address.*

18
19
20
21
22
23
24 To read about the study on the web, go to [LINK]

25
26 The survey is being conducted for NASA by Westat, a research firm in Rockville, Maryland (link
27 to westat.com).

28
29 If you have questions about the study, please go to (LINK) or call HELP LINE.

30
31
32
33
34
35 Including yourself, how many people living in this household are 18 years of age or older?
36 Please enter a number from 0 to 10. If there are more than 10 people aged 18 or more, enter
37 10.

38
39 *In order to proceed with the survey, an answer is required.

1 Did you include yourself when you said that no one is 18 years old?

2
3 Yes 1

4 No 2

5
6 *In order to proceed with the survey, an answer is required.

7
8
9

10
11

12 We are only asking adults aged 18 or older to participate in the study, so those are all the
13 questions we have for you. Thank you for your time.

14
15
16
17
18

19 These next questions are about you and the other members living in the household who are at
20 least 18 years old.

21
22 How old are you?

23
24 *In order to proceed with the survey, an answer is required.

25
26
27
28
29

30 We are only asking adults aged 18 and older to participate in the study. Please ask an adult in
31 your household to log in to the survey using the same information that you used. Thank you for
32 your time.

33
34
35
36
37

38 Are you...?

39 Male 1
40 Female 2
41 Other 3

42
43 *In order to proceed with the survey, an answer is required.

1 You said that [NUM_ADULTS] adults live in your household.
2
3 The number of adults is pre-populated using your answer. Please change if necessary.
4
5 ____ Total number of adults living in your household
6
7 How many of them are male?
8
9 ____ The number of male adults
10
11 How many of them are female?
12
13 The number below is pre-populated using the number of adults and number of males. Please
14 change if necessary.
15
16 ____ The number of female adults
17
18 How many of them are other?
19
20 The number below is pre-populated using the number of adults and number of males and
21 females. Please change if necessary.
22
23 ____ The number of other adults
24
25 *In order to proceed with the survey, an answer is required.
26
27
28

29 The computer will randomly select one adult from your household to participate in the rest of
30 this study.
31
32
33
34

35
36 The person in your household that is selected for this study is you/the other household adult.
37
38
39
40
41

42 How old is the other household adult?

1 Is that person...?

2
3 Male 1

4 Female 2

5 Other 3

6

7 *In order to proceed with the survey, an answer is required.

8

9

10

11

12

13 The computer will randomly select one adult from your household to participate in this study.

14

15

16

17

18

19 The person in your household that is selected for this study is you.

20

21

22

23

24

25 The computer will randomly select one adult from your household to participate in this study.

26 To do this, we need to collect the age and gender of each person 18 years and older in the
27 household besides yourself. Please start with the oldest and move to the youngest.

28

29 Not including yourself, how old is the oldest person who is at least 18 years old?

30

31 *In order to proceed with the survey, an answer is required.

32

33

34

35

36

37 Is the oldest person....?

38

39 Male 1

40 Female 2

41 Other 3

42

43 *In order to proceed with the survey, an answer is required.

1 Not including yourself, how old is the 2nd oldest person who is at least 18 years old?

2

3 *In order to proceed with the survey, an answer is required.

4

5

6

7

8

9 Is the 2nd oldest person....?

10

11 Male 1

12 Female 2

13 Other 3

14

15 *In order to proceed with the survey, an answer is required.

16

17

18

19

20

21 How old is the 3rd oldest person who is at least 18 years old?

22

23 *In order to proceed with the survey, an answer is required.

24

25

26

27

28

29 Is the 3rd oldest person....?

30

31 Male 1

32 Female 2

33 Other 3

34

35 *In order to proceed with the survey, an answer is required.

36

37

38

39

40

41 How old is the 4th oldest person who is at least 18 years old?

42

43 *In order to proceed with the survey, an answer is required.

1 Is the 4th oldest person....?

2

3 Male 1

4 Female 2

5 Other 3

6

7 *In order to proceed with the survey, an answer is required.

8

9

10

11

12

13 How old is the 5th oldest person who is at least 18 years old?

14

15 *In order to proceed with the survey, an answer is required.

16

17

18

19

20

21 Is the 5th oldest person....?

22

23 Male 1

24 Female 2

25 Other 3

26

27 *In order to proceed with the survey, an answer is required.

28

29

30

31

32

33 How old is the 6th oldest person who is at least 18 years old?

34

35 *In order to proceed with the survey, an answer is required.

1 Is the 6th oldest person....?

2

3 Male 1

4 Female 2

5 Other 3

6

7 *In order to proceed with the survey, an answer is required.

8

9

10

11

12

13 How old is the 7th oldest person who is at least 18 years old?

14

15 *In order to proceed with the survey, an answer is required.

16

17

18

19

20

21 Is the 7th oldest person....?

22

23 Male 1

24 Female 2

25 Other 3

26

27 *In order to proceed with the survey, an answer is required.

28

29

30

31

32

33 How old is the 8th oldest person who is at least 18 years old?

34

35 *In order to proceed with the survey, an answer is required.

36

1 Is the 8th oldest person....?

2

3 Male 1

4 Female 2

5 Other 3

6

7 *In order to proceed with the survey, an answer is required.

8

9

10

11

12

13 How old is the 9th oldest person who is at least 18 years old?

14

15 *In order to proceed with the survey, an answer is required.

16

17

18

19

20

21 Is the 9th oldest person...?

22

23 Male 1

24 Female 2

25 Other 3

26

27 *In order to proceed with the survey, an answer is required.

28

29

30

31

32

33 It seems that there are multiple people who have the same gender and age. Can you provide
34 their first name or initials so that we can tell them apart?

35

GENDER	AGE	FIRST NAME OR INITIAL

36

37

1 The computer will randomly select one adult from your household to participate in this study.

2

3

4

5

6

7 Thank you for providing the information about your household.

8 Before you ask [THE (AGE) YEAR OLD (GENDER)] to take the main survey, we would like to get

9 his/her/their name or initials and contact information in case we need to get in touch

10 with him/her/them.

11

12 First name or initial:

13 Last name:

14 Email address:

15 Cell phone number:

16

17

18

19

20

21 Thank you for completing this first step. Please ask _____ to log in to the survey using the

22 same information that you used. Let them know that we are conducting a study on aircraft

23 noise, and we would like for them to participate in the second step. We will provide them \$10 if

24 they complete the second step survey.

25

26

27

28

29

30 Thank you for providing this information about your household. Please click "Next" to continue

31 with the rest of the survey.

32

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Appendix O - Background Survey

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Note: This is a comprehensive list of all possible screens that respondents might see. For clarity, the skip logic instructions are excluded. For certain responses, some screens may not be logical and would not appear in the web survey.

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1 Thank you for volunteering to participate in this NASA-sponsored study on perceptions of
2 aircraft noise. We appreciate your participation. The first part of the study involves collecting
3 background information about yourself and your household. You will receive \$10 for filling out
4 this background survey. You will receive additional compensation, up to \$242 if you continue
5 to participate in the study which will involve you answering questions about your perceptions
6 of aircraft noise that will occur over a 30-day period. The second part of the study will start on
7 approximately (DATE). You will receive the link in a text message and/or an email from [EMAIL
8 ADDRESS], so please allow this through any email filters you may use.

9

10 Your participation in the study is voluntary. Answering the questions on the background survey
11 implies your consent to participate in this portion of the study. More information about
12 participating during the 30-day period is provided at the end of this survey.

13

14 Your responses will be treated as confidential, so only researchers associated with the project
15 will have access to your identity. Data distributed outside the research team will be in
16 summary form and will not be associated with your identity.

17

18

19

20

21

22 Are you 18 years of age or older?

23

24 Y/N

25

26

27

28

29

30 Please provide your name _____

31

32

33

34

35

36

37 An email address or cell phone number is required for you to participate in the study. We need
38 it to communicate with you electronically about the study by email or text. Please provide your
39 email address. We recommend you not provide your work email address to avoid our emails
40 being blocked by your employer's security system.

41

42 No email or do not want to provide an email

1 Do you have a cell phone with access to the internet?
2
3 Y/N
4
5
6
7
8

9 Periodic notifications will be sent during the 30-day test period. Timely notification and
10 response will be facilitated if we can notify you by text message. If you consent to being texted
11 during this study, please provide your cell phone number.
12 _____
13 By providing your cell phone number you are giving permission to text you using an
14 autodialing system at this number during the survey period.
15 Do not want to provide cell phone number
16
17
18
19
20

21 Can you receive text messages throughout the day?
22
23 Y/N
24
25
26
27
28

29 In what year were you born?
30
31
32
33
34

35 Are you...
36
37 Male
38 Female
39 Other (Specify)
40

1 What is the highest level of education you have completed?
2
3 o No schooling
4 o 1st-8th grade
5 o Some high school
6 o High school graduate/GED
7 o Some college
8 o Associates (2-year) degree
9 o Bachelor's (4-year) degree
10 o Postgraduate degree (Master's degree, Doctorate degree, M.D., J.D.)

11
12
13
14
15

16 Are you of Hispanic or [Latina/Latino/Latinx] origin? Y/N

17
18
19
20
21

22 What is your race? You may identify more than one category.
23
24 o White
25 o Black or African American
26 o Asian
27 o Native Hawaiian or Other Pacific Islander
28 o American Indian or Alaska Native
29 o Other (Please specify _____)

30
31
32
33
34

35 Is this house, apartment, or mobile home....
36
37 o Owned by you or someone in this household with a mortgage or loan? Include home
38 equity loans
39 o Owned by you or someone in this household free and clear (without a mortgage or
40 loan)?
41 o Rented?
42 o Occupied by you without payment of rent?

1 Do you work at a job outside your home?

2

3 Y/N

4

5

6

7

8

9 Do you generally work in one place, such as an office, warehouse, or other central location?

10

11 Y/N

12

13

14

15

16

17 As part of the survey, we will need to know your location when we ask about aircraft noise.

18 Please provide the location of your work, school or any other places that you go to frequently.

19 For each place, put a short name that you can use when referencing this location on later

20 surveys. For example, if you work in one place, you can use "work".

21

22 Location name:

23 Location address:

24

25

26

27

28

29

30 Which best describes the building where you live?

31

32 A mobile home

33 A one-family house detached from any other house

34 A one-family house attached to one or more houses

35 A building with 2 apartments

36 A building with 3 or 4 apartments

37 A building with 5 to 9 apartments

38 A building with 10 to 19 apartments

39 A building with 20 to 49 apartments

40 A building with 50 or more apartments

41 Boat, RV, Van, etc...

42

43

1 How many floors completely above ground does your building have?

2

3

Enter number

4

5

6

7

8

9

10 On which floor is your apartment?

11

12

Enter number

13

14

15

16

17

18

19 About when was your building first built?

20

21 2020 or later

22 2010 to 2019

23 2000 to 2009

24 1990 to 1999

25 1980 to 1989

26 1970 to 1979

27 1960 to 1969

28 1950 to 1959

29 1940 to 1949

30 1939 or earlier

31

32

33

34

35

36 What type of siding is the building where you live?

37 Select all that apply.

38

39 Stone

40 Brick

41 Wood

42 Vinyl

1 0 Other (specify)

1 Which of the following best describes the building in which you work? If you work in more
2 than one location, enter the one where you spend most of your time.

3

4 Single residence

5 Warehouse or flat box store

6 Single level office/school/commercial

7 Multi-floored office/school/commercial

8 Mid-rise multi-story (4-11 floors)

9 High-rise multi-story (12-39 floors)

10 Skyscraper multi-story (40+ floors)

11

12

13

14

15

16 On which floor is your work located?

17

18 Enter number

1 Thank you for answering these questions. We will send you a debit card with \$10 in
2 appreciation for your time.
3

4 Around (DATE), there will be a 30-day period where we ask you about any aircraft noise you
5 may or may not hear. On some days there will be no surveys and on others there may be more
6 than one survey. Note that you may not receive a survey request for every single time you hear
7 aircraft noise. When we want your feedback on any noise you might hear, we will send you a
8 message that asks you to respond to a few questions about whether you heard the noise. It is
9 important to respond as soon as possible after getting the message. If you are driving when you
10 get the message, please wait until you have stopped driving. On days where there is more than
11 one survey, you will receive more than one message on the same day.
12

13 At the end of the day, we will send you a message to complete a survey that asks you about
14 your experiences over the entire day. At the end of the study, we will also ask you to provide
15 additional information for the study. We will provide monetary incentives that increase with
16 the number of surveys you are able to complete.
17

18 You have the option to use your own smart phone or other mobile device to respond using an
19 app you can download. Or you may choose to complete the surveys on the web using your
20 phone or another device, like a laptop, tablet, or desktop computer.
21

22 Instructions on how to download the app and participate in the study via web or app will be
23 provided in a thank you letter with your \$10 debit card for participating in this background
24 survey. If you'd like to review that now, please click here ([link to website with survey
25 information](#)).
26

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Appendix P – Single Event Survey

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Note: This is a comprehensive list of all possible screens that respondents might see. For clarity, the skip logic instructions are excluded. For certain responses, some screens may not be logical and would not appear in the web survey.

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1 The aircraft noise occurred at approximately (TIME). Where were you at approximately (TIME)?

2

3 Home (or within a 5-minute walk)

4 Work (or within a 5-minute walk)

5 Somewhere else

6

7

8

9

10

11

12 Please enter your location at approximately (TIME). You can provide an approximate address, a
13 named location, e.g., a store or other landmark, or cross street.

14 _____

15

16

17

18

19

20

21 Did you hear the aircraft noise that occurred at (TIME)?

22

23 Y/N

24

25

26

27

28

29 How much did the aircraft noise bother, disturb, or annoy you?

30

31 Not at all

32 Slightly

33 Moderately

34 Very

35 Extremely

36

37

38

39

40

41 Did the aircraft noise startle you?

42

1 Y/N

2

1 Vibration is a motion. The motion may be seen, felt, or heard. Did you see, feel, or hear
2 vibration from the aircraft noise?

3
4 Y/N

5
6
7
8
9

10 Rattle is a type of noise that can occur when objects move due to vibration. Did you hear rattle
11 from the aircraft noise?

12
13 Y/N

14
15
16
17
18

19 Were you indoors or outdoors at (TIME)?

- 20
21 Indoors
22 Outdoors

23
24
25
26
27
28

29 Was there at least one window open in the room at that time?

- 30
31 Yes
32 No

33
34
35
36
37

38 Please enter any additional comments.

1

2

Appendix Q - Daily Summary Survey

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Note: This is a comprehensive list of all possible screens that respondents might see. For clarity, the skip logic instructions are excluded. For certain responses, some screens may not be logical and would not appear in the web survey.

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1 Some of the questions below may seem like those you already answered when you responded
2 to a survey earlier in the day. We are interested in your overall response to aircraft noise today.
3 You may not have heard any aircraft or you may not have had time to respond to each of our
4 requests. For the questions below, please think about your overall experience, throughout the
5 day.

6
7
8
9

10

11 Did you hear any aircraft noise today?

12

13 Y/N

14

15

16

17

18

19 How many times did you hear aircraft noise today?

20

21

22

23

24

25

26

27 Thinking about your day so far, how much did the aircraft noise bother, disturb, or annoy you?

28

29 Not at all

30 Slightly

31 Moderately

32 Very

33 Extremely

34

35

36

37

38

39

40 Thinking about your day so far, did the aircraft noise startle you?

41

42 Y/N

43

1 Vibration is a motion. The motion may be seen, felt or heard. Thinking about your day so far,
2 did you see, feel or hear vibration from aircraft noise?

3
4 Y/N

5
6
7
8
9

10 Rattle is a type of noise that can occur when objects move due to vibration. Thinking about your
11 day so far, did you hear rattle from aircraft noise?

12
13 Y/N

14
15
16
17
18

19 Where were you at approximately (TIME)?

- 20
- 21 Home (or within a 5-minute walk) – 123 Home Street
 - 22 Work (or within a 5-minute walk of work) – 456 Work Street
 - 23 789 Additional Location Street
 - 24 Somewhere else

25
26
27
28
29
30

31 Please enter your location at approximately (TIME). You can provide an approximate address, a
32 named location, e.g., a store or other landmark, or cross street.

33
34
35
36
37
38

39 Please enter any additional comments.

1

Appendix R - End of Test Survey

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Note: This is a comprehensive list of all possible screens that respondents might see. For clarity, the skip logic instructions are excluded. For certain responses, some screens may not be logical and would not appear in the web survey.

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1 Thank you for helping the study collect valuable information on your perception of aircraft
2 noise. This final set of questions asks you to describe more about your general reactions to the
3 noises and sounds in your environment.

4
5
6
7
8

9 Thinking about the last 30 days or so, how much did aircraft noise bother, disturb, or annoy
10 you?

11
12
13
14
15
16

- Not at all
- Slightly
- Moderately
- Very
- Extremely

17
18
19
20
21
22

23 Thinking about noise more generally, for each statement, please indicate if you Strongly
24 disagree, Moderately disagree, Neither agree nor disagree, Moderately agree or Strongly agree.

25
26
27
28
29
30
31
32

- I believe that people have a hard time getting used to noise.
- I believe that with time most people adapt to noise.
- I believe that with time I can adapt to noise.
- I believe that with time I can get used to even the loudest noise.

33

1 Next is a list of noises that might occur in your neighborhood. Please indicate how much each
2 noise bothers, disturbs or annoys you. When you are at home, how much does noise from the
3 indicated noise source bother, disturb, or annoy you?
4
5 Not at all
6 Slightly
7 Moderately
8 Very
9 Extremely
10
11 Not Heard
12
13 Barking dogs
14
15 Thunder
16
17 Street traffic such as cars, trucks, or motorcycles
18
19 Helicopters
20
21 Commercial airplanes
22
23 Military airplanes
24

25
26
27
28
29

30 Had you heard about this study before you received our invitation to participate? Y/N
31
32
33
34
35

36 How did you hear about it? Select all that apply
37
38 Friend or family
39 Social media
40 Newspaper
41 On-line publication
42 TV or radio
43 Other (specify)

1 For each statement, please indicate if you Strongly disagree, Moderately disagree, Neither
2 agree nor disagree, Moderately agree or Strongly agree.

3

4 I am very concerned about the negative impact of air travel on the environment.

5

6 Supersonic commercial planes should be a high priority for efforts to improve transportation in
7 the U.S.

8

9

10

11

12

13 We're interested in the noise that people hear in their neighborhood. Do you think your
14 neighborhood is quiet, noisy or about average?

15

16 Quiet

17 Average

18 Noisy

19

20

21

22

23

24

25 How long have you lived in the area?

26

27 Less than 1 year

28 1 year

29 2 years

30 3-5 years

31 6-9 years

32 10 or more years