1	SCRIPT FOR		
2	THE ENVIRONMENTAL IMPACT STATEMENT FOR THE SPACEX STARSHIP-SUPER HEAVY		
3	LAUNCH VEHICLE AT LAUNCH COMPLEX 39A AT THE KENNEDY SPACE CENTER,		
4	MERRITT ISLAND, FLORIDA		
5	- IN-PERSON PUBLIC MEETING -		
6	NOTE: AN ASTERISK (*) INDICATES SLIDE ADVANCEMENT		
7	BLUE HIGHLIGHT INDICATES ITEMS FACILITATOR WILL ADJUST BETWEEN MEETINGS.		
8	SLIDE 1 — TITLE SLIDE (Speaker: Facilitator)		
9	FACILITATOR WILL CALL THE MEETING TO ORDER		
10	GOOD AFTERNOON/EVENING AND THANK YOU FOR JOINING US FOR THIS PUBLIC		
11	MEETING FOR THE ENVIRONMENTAL IMPACT STATEMENT OR EIS FOR THE SPACEX		
12	STARSHIP-SUPER HEAVY LAUNCH VEHICLE AT LAUNCH COMPLEX 39A AT THE KENNEDY		
13	SPACE CENTER IN MERRITT ISLAND, FLORIDA.		
14	MY NAME IS JENNIFER AND I WILL SERVE AS YOUR FACILITATOR THIS		
15	AFTERNOON/EVENING.		
16	BEFORE WE BEGIN THE PRESENTATION, I WANT TO DIRECT YOUR ATTENTION TO THE		
17	EMERGENCY EXITS, LOCATED AND RESTROOMS LOCATED ALSO ENCOURAGE		
18	THOSE NOT SEATED TO BE SEATED.		
19	THANK YOU!*		
20	SLIDE 2 — MEETING AGENDA (Speaker: Facilitator)		
20	OLIDE 2 — WILLTING AGENDA (Speaker, Facilitator)		
21	AT THIS TIME, I WOULD LIKE TO GO OVER THE AGENDA WE WILL BE FOLLOWING THIS		
22	AFTERNOON/EVENING. THIS MEETING WILL BE CONDUCTED IN THREE PARTS.		
23	FIRST, WE WILL START WITH A FEW INTRODUCTIONS.		

- 1 THEN WE WILL THEN MOVE INTO A FAA PRE-RECORDED PRESENTATION. THE
- 2 PRESENTATION WILL GO OVER THE PROJECT HISTORY AND LOCATION, FAA'S REVIEW OF
- 3 SPACEX'S PROPOSED OPERATIONS, SUMMARIZE FAA'S ANALYSIS OF POTENTIAL
- 4 IMPACTS TO ENVIRONMENTAL RESOURCES, THE ENVIRONMENTAL REVIEW PROCESS
- 5 AND SCHEDULE, AND HOW YOU CAN COMMENT ON THE DRAFT EIS.
- 6 AFTER THE PRE-RECORDED PRESENTATION, WE WILL CONCLUDE WITH AN OPEN HOUSE
- 7 WHERE YOU WILL BE INVITED TO JOIN FAA STAFF AT THE DISPLAY BOARDS TO ASK
- 8 CLARIFYING QUESTIONS. YOU MAY ALSO PROVIDE YOUR VERBAL COMMENTS WITH A
- 9 COURT REPORTER. [POINT TO AREA] ADDITIONALLY, YOU CAN SUBMIT WRITTEN
- 10 COMMENTS AT THE COMMENT TABLE. * [POINT TO TABLES]

11 SLIDE 3 — INTRODUCTIONS (Speaker: Facilitator)

- 12 AT THIS TIME, I WOULD LIKE TO INTRODUCE THE SIX FAA REPRESENTATIVES WHO WILL
- 13 BE PARTICIPATING IN THIS AFTERNOON'S/EVENING'S MEETING.
- 14 FIRST, I'D LIKE TO INTRODUCE STACEY ZEE, MANAGER IN THE OPERATIONS SUPPORT
- 15 BRANCH IN THE OFFICE OF COMMERCIAL SPACE TRANSPORTATION OF THE FEDERAL
- 16 AVIATION ADMINISTRATION (FAA). [STACEY STANDS AND WAVES]
- 17 NEXT, I WOULD LIKE TO INTRODUCE EVA LONG, AMY HANSON, CHELSEA CLARKSON,
- AND NICHOLAS BAKER, ENVIRONMENTAL PROTECTION SPECIALISTS IN THE OPERATIONS
- 19 SUPPORT BRANCH IN THE OFFICE OF COMMERCIAL SPACE TRANSPORTATION OF THE
- 20 FEDERAL AVIATION ADMINISTRATION (FAA). FINALLY, I WOULD LIKE TO INTRODUCE
- 21 TYRONE CONNER, POLICY ANALYST IN THE OPERATIONS SUPPORT BRANCH IN THE
- 22 OFFICE OF COMMERCIAL SPACE TRANSPORTATION OF THE FAA. [EVA, AMY, CHELSEA,
- 23 NICK, AND TYRONE STAND AND WAVE]

SLIDE 4 — MEDIA CONTACT (Speaker: Facilitator)

- 2 FOR ANY MEDIA REPRESENTATIVES THAT HAVE JOINED THIS AFTERNOON/EVENING,
- 3 PLEASE SPEAK TO STEVE KULM FROM THE FAA WITH US THIS AFTERNOON/EVENING OR
- 4 CONTACT THE FAA PRESS OFFICE AT PRESSOFFICE@FAA.GOV *

SLIDE 5 — IN-PERSON AND VIRTUAL PUBLIC

- 6 | **MEETINGS** (Speaker: Facilitator)
- 7 THIS PUBLIC MEETING IS THE 1ST/2ND/3RD/4TH OF FOUR IN-PERSON PUBLIC MEETINGS.
- 8 ANOTHER MEETING WILL BE HELD LATER THIS EVENING, FROM 6:00-8:00 PM. TWO
- 9 ADDITIONAL IN PERSON MEETINGS WILL BE HELD THURSDAY, AUGUST 28TH AT THE
- 10 RADISSON CONFERNCE CENTER AT 1:00 AND 6:00 PM. ADDITIONALLY, THE FAA WILL
- HOLD ONE VIRTUAL MEETING ON SEPTEMBER 3, 2025, FROM 6:00 TO 8:00 PM EASTERN
- 12 TIME USING ZOOM WEBINAR.
- 13 THE DATES AND LOCATIONS OF THE IN-PERSON AND VIRTUAL MEETINGS ARE SHOWN
- 14 ON THIS SLIDE.
- 15 ALTHOUGH MULTIPLE PUBLIC MEETINGS ARE BEING/WERE CONDUCTED, THE SAME
- 16 CONTENT IS **BEING/WAS** PRESENTED AT EACH MEETING. ADDITIONALLY, ALL
- 17 INFORMATION RELATED TO THE EIS IS AVAILABLE AT [FACILITATOR SPELLS OUT WEB
- 18 ADDRESS]
- 19 HTTPS://WWW.FAA.GOV/SPACE/STAKEHOLDER_ENGAGEMENT/SPACEX_STARSHIP_KSC
- 20 *

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21 SLIDE 6 — HOW TO SUBMIT COMMENTS (Speaker:

- 22 **Facilitator**)
- 23 THIS MEETING IS INTENDED TO PROVIDE THE PUBLIC WITH AN OPPORTUNITY TO
- 24 BECOMER FAMILIAR WITH THE PROPOSED PROJECT AND SUBMIT COMMENTS. THESE

- 1 COMMENTS WILL BE PART OF THE OFFICIAL RECORD AND A SUMMARY WILL BE
- 2 INCLUDED IN THE FINAL EIS.
- 3 YOU CAN SUBMIT COMMENTS IN FOUR WAYS. FIRST, YOU CAN PROVIDE VERBAL
- 4 COMMENTS DURING THE MEETING TODAY/TONIGHT, WHICH WILL BE RECORDED BY A
- 5 COURT REPORTER. SECOND, YOU CAN VISIT REGULATIONS.GOV AND SEARCH FOR
- 6 DOCKET ID: FAA-2024-1395 TO SUBMIT COMMENTS DIRECTLY ONLINE. THIRD, YOU CAN
- 7 MAIL WRITTEN COMMENTS TO: MS. EVA LONG, FAA ENVIRONMENTAL PROTECTION
- 8 SPECIALIST, C/O LEIDOS, 2877 GUARDIAN LANE, VIRGINIA BEACH, VIRGINIA 23452.
- 9 FINALLY, YOU MAY SUBMIT YOUR WRITTEN COMMENTS ON THE PROVIDED COMMENT
- 10 FORMS THIS AFTERNOON/EVENING. [POINT TO COMMENT TABLE]
- 11 YOU ONLY NEED TO SUBMIT COMMENTS ONCE. THE FAA WILL RESPOND IN THE FINAL
- 12 EIS TO ALL SUBSTANTIVE COMMENTS POST-MARKED OR RECEIVED BY NO LATER THAN
- 13 SEPTEMBER 22, 2025. SUBSTANTIVE COMMENTS ARE THOSE THAT IDENTIFY POTENTIAL
- 14 ALTERNATIVES, INFORMATION, AND ANALYSES RELEVANT TO THE PROPOSED ACTION.
- 15 ALL SUBSTANTIVE COMMENTS RECEIVED, REGARDLESS OF FORMAT, WILL BE GIVEN
- 16 FULL AND EQUAL CONSIDERATION.
- 17 AT THIS TIME, WE WILL NOW BEGIN THE VIDEO PRESENTATION. *
- 18 [DIM LIGHTS]

20

19 [BEGIN VIDEO PRESENTATION]

SLIDE 7 — FAA PRESENTATION

- 21 WELCOME TO THE FEDERAL AVIATION ADMINISTRATION'S, OR FAA'S, PUBLIC MEETING
- 22 FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT OR EIS FOR THE SPACEX
- 23 STARSHIP-SUPER HEAVY LAUNCH VEHICLE AT LAUNCH COMPLEX 39A OR LC-39A AT
- 24 KENNEDY SPACE CENTER, KNOWN AS KSC IN MERRITT ISLAND, FLORIDA, ALSO KNOWN

- 1 AS THE DRAFT EIS. THIS VIDEO WILL PROVIDE AN OVERVIEW OF THE PROPOSED
- 2 PROJECT. *

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SLIDE 8— WHY ARE WE HERE?

- 4 THE FAA IS EVALUATING SPACE EXPLORATION TECHNOLOGIES CORPORATION'S, OR
- 5 SPACEX'S, PROPOSED OPERATION OF THE STARSHIP-SUPER HEAVY LAUNCH VEHICLE AT
- 6 LC-39A AT KSC IN MERRITT ISLAND, FLORIDA.
- 7 FOR OPERATIONS AT LC-39A, SPACEX MUST OBTAIN A NEW LICENSE OR MODIFICATION
- 8 OF THEIR EXISITING VEHICLE OPERATOR LICENSE FROM THE FAA FOR STARSHIP-SUPER
- 9 HEAVY LAUNCH AND LANDING OPERATIONS. THE PROPOSED PROJECT ALSO INCLUDES
- 10 UP TO 44 STARSHIP SUPER HEAVY LAUNCHES PER YEAR, UP TO 44 SUPER HEAVY
- 11 LANDINGS PER YEAR, TO INCLUDE LANDINGS AT LC-39A, LANDING ON A DRONESHIP IN
- 12 THE ATLANTIC OCEAN, OR EXPENDING IN THE ATLANTIC OCEAN. UP TO 44 STARSHIP
- 13 LANDINGS PER YEAR, TO INCLUDE LANDINGS AT LC-39A, LANDING ON A DRONESHIP IN
- 14 THE ATLANTIC OCEAN, OR SOFT-WATER OR HARD-WATER LANDING WITH EXPENDING
- 15 OR RECOVERY IN THE ATLANTIC OCEAN, PACIFIC OCEAN, OR INDIAN OCEAN, AND
- 16 CONSTRUCTION OF LAUNCH, LANDING, AND OTHER ASSOCIATED INFRASTRUCTURE AT
- 17 AND IN PROXIMITY TO LC-39A.
- 18 THE FAA WOULD NEED TO AUTHORIZE ADDITIONAL TEMPORARY AIRSPACE CLOSURES
- 19 TO ACCOMMODATE LAUNCH AND REENTRY OPERATIONS AT LC-39A.
- 20 THEREFORE, THE FAA HAS ANALYZED THE POTENTIAL ENVIRONMENTAL IMPACTS OF
- 21 THESE PROPOSED OPERATIONS IN THE DRAFT EIS.
- 22 THE COMPLETION OF THE ENVIRONMENTAL REVIEW PROCESS DOES NOT GUARANTEE
- 23 THAT THE FAA WILL ISSUE A LICENSE TO SPACEX. SPACEX MUST ALSO MEET THE FAA'S
- 24 SAFETY, RISK, AND FINANCIAL RESPONSIBILITY REQUIREMENTS. *

SLIDE 9 — NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

- 3 THE NATIONAL ENVIRONMENTAL POLICY ACT, OR NEPA, IS A FEDERAL LAW THAT
- 4 REQUIRES FEDERAL AGENCIES TO CONSIDER THE POTENTIAL ENVIRONMENTAL
- 5 IMPACTS OF PROPOSED ACTIONS SUBJECT TO FEDERAL CONTROL OR RESPONSIBILITY
- 6 BEFORE A DECISION IS MADE. FAA DECISIONS TO LICENSE COMMERCIAL SPACE
- 7 OPERATIONS AND TO CLOSE ASSOCIATED AIRSPACE ARE PROPOSED ACTIONS SUBJECT
- 8 TO NEPA. AGENCIES FOLLOW A RIGOROUS PROCESS BEFORE MAKING A FINAL
- 9 DECISION. THIS PROCESS INCLUDES CONSIDERATION OF A REASONABLE RANGE OF
- 10 ALTERNATIVES, POTENTIAL ENVIRONMENTAL IMPACTS, PUBLIC INPUT, TRIBAL OR
- 11 GOVERNMENT CONSULTATION, AND COMMENTS PROVIDED ON DRAFT DOCUMENTS.
- 12 THE ANALYSIS OF ENVIRONMENTAL CONSEQUENCES CAN BE PRESENTED IN AN EIS. AN
- 13 EIS IS A DOCUMENT USED TO DESCRIBE THE ANTICIPATED ENVIRONMENTAL IMPACTS
- 14 OF AN ACTION AND DETERMINE WHETHER THE ACTION HAS THE POTENTIAL TO
- 15 SIGNIFICANTLY AFFECT THE HUMAN ENVIRONMENT.
- 16 THE NEPA PROCESS CONCLUDES WHEN THE FAA PUBLISHES A RECORD OF DECISION, OR
- 17 ROD. *

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SLIDE 10 — PROJECT HISTORY

- 19 LC-39A AT KSC WAS PREVIOUSLY SITED FOR STARSHIP-SUPER HEAVY ACTIVITIES
- 20 THROUGH NASA'S FINAL ENVIRONMENTAL ASSESSMENT OR EA FOR THE SPACEX
- 21 STARSHIP AND SUPER HEAVY LAUNCH VEHICLE AT KSC WHICH RESULTED IN A FINDING
- 22 OF NO SIGNIFICANT IMPACT OR FONSI.
- 23 THE 2019 NASA EA WAS NOT ADOPTED BY THE FAA BECAUSE SPACEX DID NOT APPLY
- 24 TO THE FAA FOR A COMMERCIAL LAUNCH VEHICLE OPERATOR LICENSE AT THAT TIME
- 25 AND FAA HAD NO FEDERAL ACTION TO CONSIDER.

- 1 IN ACCORDANCE WITH THE 2019 NASA EA, SPACEX HAS UNDERTAKEN
- 2 INFRASTRUCTURE IMPROVEMENTS AT LC-39A. THE STARSHIP-SUPER HEAVY CONCEPT
- 3 OF OPERATIONS HAS BEEN UPDATED AND IS EVALUATED IN THIS EIS. *

4 | SLIDE 11 — PURPOSE AND NEED

- 5 THE PURPOSE OF STARSHIP-SUPER HEAVY AT LC-39A IS TO PROVIDE GREATER MISSION
- 6 CAPABILITY TO NASA AND OTHER SPACEX CUSTOMERS. SPACEX'S ACTIVITIES WOULD
- 7 CONTINUE TO FULFILL THE UNITED STATES' EXPECTATION THAT INCREASED
- 8 CAPABILITIES AND REDUCED SPACE TRANSPORTATION COSTS WILL ENHANCE
- 9 EXPLORATION AND SUPPORT U.S. LEADERSHIP IN SPACE.
- 10 STARSHIP-SUPER HEAVY AT LC-39A IS NEEDED TO SATISFY GOVERNMENT AND PUBLIC
- 11 INTERESTS AND REDUCE OPERATIONAL COSTS.*

SLIDE 12 — FAA LICENSING PROCESS FOR VEHICLE OPERATORS

- 14 THE FIGURE ON THIS SLIDE PROVIDES AN OVERVIEW OF THE FAA'S LICENSING PROCESS
- 15 FOR VEHICLE OPERATORS. THE ILLUSTRATION SHOWCASES THE DIFFERENT REVIEWS.
- 16 THAT OCCUR DURING EACH PHASE OF THE LICENSING PROCESS. THE ISSUANCE OR
- 17 MODIFICATION OF A LICENSE, INCLUDING RENEWALS, BY THE FAA IS CONSIDERED A
- 18 MAJOR FEDERAL ACTION UNDER NEPA. THUS, THE FAA IS ANALYZING THE
- 19 ENVIRONMENTAL IMPACTS OF THE PROPOSED ISSUANCE OF A COMMERCIAL LAUNCH
- 20 VEHICLE OPERATOR LICENSE FOR SPACEX STARSHIP-SUPER HEAVY AT LC-39A AT KSC IN
- 21 MERRITT ISLAND, FLORIDA, AS WELL AS TEMPORARY CLOSURE OF ASSOCIATED
- 22 AIRSPACE IN AN EIS.

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- 23 THE FAA'S LICENSE DETERMINATION PROCESS INVOLVES SEVERAL ASPECTS, WHICH
- 24 INCLUDE POLICY, LOCATION, SAFETY, PAYLOAD, AND ENVIRONMENTAL REVIEW. THIS

- 1 EIS WOULD FULFILL THE ENVIRONMENTAL REVIEW PORTION OF THE LICENSE
- 2 EVALUATION AND DETERMINATION.
- 3 THE COMPLETION OF THE ENVIRONMENTAL REVIEW PROCESS, OR THE NEPA PROCESS,
- 4 DOES NOT GUARANTEE THAT THE FAA WILL ISSUE A LICENSE TO SPACEX. ONCE THE FAA
- 5 DOES MAKE A LICENSING DETERMINATION, SPACEX MAY BE REQUIRED TO MEET
- 6 ADDITIONAL MONITORING AND SAFETY INSPECTION REQUIREMENTS. *

SLIDE 13 — PROJECT LOCATION AND SITE OVERVIEW

- 9 THE PROPOSED ACTION WOULD TAKE PLACE AT THE NASA-OWNED, SPACEX LEASED
- 10 LAUNCH SITE LOCATED ON NORTHERN KSC PROPERTY, APPROXIMATELY THREE MILES
- 11 EAST OF NASA'S VEHICLE ASSEMBLY BUILDING PICTURED ON THE LEFT OF THIS SLIDE.
- 12 LC-39A CURRENTLY SUPPORTS FALCON 9 AND FALCON HEAVY LAUNCHES. FOLLOWING
- 13 COMPLETION OF THE 2019 NASA EA, SPACEX BEGAN DEVELOPING A SITE WITHIN THE
- 14 PERIMETER OF LC-39A FOR STARSHIP-SUPER HEAVY LAUNCH OPERATIONS INTENDED
- 15 FOR FUTURE STARSHIP-SUPER HEAVY MISSIONS. SPACEX WOULD CONTINUE TO
- 16 LAUNCH FALCON MISSIONS AT LC-39A WHILE STARSHIP-SUPER HEAVY IS OPERATIONAL.
- 17

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SLIDE 14 — STARSHIP-SUPER HEAVY LAUNCH VEHICLE

- 20 THE STARSHIP-SUPER HEAVY VEHICLE IS COMPRISED OF TWO STAGES. SUPER HEAVY IS
- 21 THE FIRST STAGE, OR BOOSTER, AND STARSHIP IS THE SECOND STAGE. THE FULLY
- 22 INTEGRATED STARSHIP-SUPER HEAVY VEHICLE IS APPROXIMATELY 150 METERS OR 500
- 23 FEET TALL AND 9 METERS OR 30 FEET IN DIAMETER. AS DESIGNED, BOTH STAGES ARE
- 24 INTENDED TO BE FULLY REUSABLE FOR MULTIPLE MISSIONS AND EXPECTED TO HAVE

- 1 MINIMAL POST-FLIGHT REFURBISHMENT REQUIREMENTS, WITH ANY POTENTIAL
- 2 REFURBISHMENT ACTIONS TAKING PLACE AT SPACEX FACILITIES AT KSC.
- 3 STARSHIP IS EQUIPPED WITH 9 RAPTOR ENGINES AND SUPER HEAVY IS EQUIPPED WITH
- 4 UP TO 35. THE RAPTOR ENGINES ARE POWERED BY LIQUID OXYGEN OR (LOX) AND
- 5 LIQUID METHANE. THE BELOW TABLE PROVIDES SPECIFICATIONS OF THE VEHICLE AS
- 6 ANALYZED IN THE DRAFT EIS. *

SLIDE 15 — PROPOSED OPERATIONS

- 8 THE DISPLAYED TABLE PROVIDES SPECIFICATIONS OF THE PROPOSED STARSHIP AND
- 9 SUPER HEAVY STATIC FIRE ENGINE TESTS.
- 10 DURING A STATIC FIRE ENGINE TEST, THE VEHICLE ENGINES ARE IGNITED FOR A SHORT
- DURATION OF UP TO 15 SECONDS, GENERATING A HEAT PLUME, AND THEN SHUT
- 12 DOWN. THE GOAL OF A STATIC FIRE ENGINE TEST IS TO VERIFY ENGINE CONTROL AND
- 13 PERFORMANCE.

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- 14 UNDER THE PROPOSED ACTION ANALYZED IN THE DRAFT EIS, SPACEX WOULD CONDUCT
- 15 ONE STATIC FIRE ENGINE TEST PER LAUNCH; 44 TOTAL STATIC FIRE TESTS PER STAGE
- 16 FOR A TOTAL OF 88 PER YEAR. STATIC FIRE ENGINE TESTS WOULD BE CONDUCTED
- 17 DURING THE DAYTIME. DAYTIME REFERS TO THE HOURS OF 7:00 AM TO 10:00 PM. *

SLIDE 16 — PROPOSED OPERATIONS CONT.

- 19 THE TABLE ON THIS SLIDE PROVIDES SPECIFICATIONS OF THE PROPOSED STARSHIP AND
- 20 SUPER HEAVY LAUNCHES AND LANDINGS.
- 21 STARSHIP-SUPER HEAVY WOULD LAUNCH FROM LC-39A UP TO 44 TIMES PER YEAR.
- 22 LAUNCHES COULD OCCUR AT ANY TIME OF DAY OR NIGHT. FOR PURPOSES OF
- 23 ANALYSIS, IT WAS ASSUMED THAT 22 LAUNCHES WOULD OCCUR DURING THE DAY AND
- 24 22 LAUNCHES WOULD OCCUR AT NIGHT.

- 1 EACH STARSHIP-SUPER HEAVY ORBITAL LAUNCH WOULD INCLUDE SEPARATELY
- 2 LANDING STARSHIP AND SUPER HEAVY AT LC-39A. SUPER HEAVY COULD ALSO LAND ON
- 3 A DRONESHIP OR BE EXPENDED IN THE ATLANTIC OCEAN WHILE STARSHIP COULD ALSO
- 4 LAND ON A DRONESHIP IN THE ATLANTIC OR BE EXPENDED IN THE ATLANTIC, PACIFIC,
- 5 OR INDIAN OCEAN. FOR PURPOSES OF ANALYSIS, IT WAS ASSUMED THAT 22 LANDINGS
- 6 WOULD OCCUR DURING THE DAY AND 22 LANDINGS WOULD OCCUR AT NIGHT FOR
- 7 EACH STAGE OF THE STARSHIP-SUPER HEAVY VEHICLE. *

SLIDE 17 — PROPOSED LAUNCH OPERATIONS

- 9 DURING A LAUNCH, ENGINE IGNITION WOULD GENERATE A HEAT PLUME THAT WOULD
- 10 DISSAPATE WITHIN MINUTES. A FLAME DIVERTER OR SIMILAR INFRASTRUCTURE
- WOULD REDUCE POTENTIAL EFFECTS OF THE PLUME, AND DELUGE WATER WOULD BE
- 12 RELEASED TO COOL THE LAUNCH MOUNT AND DIVERTER AS THE LAUNCH OCCURS.
- 13 LAUNCHES WOULD RESULT IN NOISE AND VIBRATION, AND NIGHTTIME LAUNCHES
- 14 WOULD REQUIRE LIGHTING. *

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SLIDE 18 — PROPOSED OPERATIONS-SECURITY AREAS

- 17 IN ORDER TO ESTABLISH A SAFE AND SECURE ENVIRONMENT FOR STATIC FIRE TESTS,
- 18 LAUNCHES, AND LANDINGS, SPACEX, NASA, AND THE FAA, IN COLLABORATION WITH
- 19 OTHER FEDERAL, STATE, AND LOCAL AGENCIES, WILL IMPLEMENT SECURITY
- 20 PROCEDURES SUCH AS TRAFFIC CHECKPOINTS, ACCESS CONTROL CHECKPOINTS,
- 21 MARITIME CLOSURES, AIRSPACE CLOSURES, AND OTHER SECURITY SWEEPS. *

22 | SLIDE 19 — PROPOSED LANDING OPERATIONS

- 23 DURING FLIGHT, SUPER HEAVY WOULD SEPARATE FROM STARSHIP AND PERFORM A
- 24 CONTROLLED DESCENT TO THE TOWER AT LC-39A TO BE CAUGHT WITH THE TOWER'S
- 25 ARMS. ONCE NEAR THE LANDING LOCATION, SUPER HEAVY WOULD IGNITE ITS ENGINES

- 1 TO CONDUCT A CONTROLLED LANDING. AS SUPER HEAVY SLOWS DOWN DURING ITS
- 2 LANDING APPROACH, A SONIC BOOM WOULD BE GENERATED. SUPER HEAVY COULD
- 3 ALSO LAND ON A DRONESHIP IN THE ATLANTIC OCEAN.
- 4 SPACEX INTENDS SUPER HEAVY TO BE FULLY REUSABLE AND RETURN TO LC-39A
- 5 FOLLOWING OPERATIONAL FLIGHTS. HOWEVER, VEHICLES THAT WILL NOT BE REUSED
- 6 WOULD BE EXPENDED IN THE ATLANTIC OCEAN. *

SLIDE 20 — PROPOSED LANDING OPERATIONS

- 8 STARSHIP WOULD LAND AT LC-39A OR ON A DRONESHIP IN THE ATLANTIC OCEAN.
- 9 STARSHIP WOULD PERFORM A CONTROLLED DESCENT TO ITS LANDING LOCATION. AS
- 10 STARSHIP SLOWS DOWN DURING ITS LANDING APPROACH, A SONIC BOOM WOULD BE
- 11 GENERATED.

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- 12 EARLY PROGRAM LAUNCHES COULD REQUIRE EXPENDING STARSHIP IN THE BROAD
- 13 OPEN OCEAN AS DEPICTED IN THE IMAGES ON THIS SLIDE. *

SLIDE 21— LEAD AND COOPERATING AGENCIES

- 16 THE FAA IS THE LEAD FEDERAL AGENCY FOR THIS EIS AND RESPONSIBLE FOR ANALYZING
- 17 THE POTENTIAL ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION AND CREATING
- 18 AIRSPACE CLOSURES TO ENSURE PUBLIC SAFETY.
- 19 THE FAA REQUESTED COOPERATING AGENCIES TO PARTICIPATE IN THE NEPA PROCESS
- 20 DUE TO THEIR SPECIAL EXPERTISE OR JURISDICTION BY LAW OVER THE LAUNCH
- 21 FACILITY OR MARITIME ENVIRONMENT. COOPERATING AGENCIES FOR THIS DRAFT EIS
- 22 INCLUDE NASA, THE DEPARTMENT OF THE AIR FORCE, U.S. COAST GUARD, U.S. FISH
- 23 AND WILDLIFE SERVICE MERRITT ISLAND NATIONAL WILDLIFE REFUGE, AND NATIONAL
- 24 PARK SERVICE CANAVERAL NATIONAL SEASHORE. *

SLIDE 22 — NOISE: BASICS

- 2 THE PERCEPTION AND EVALUATION OF SOUND INVOLVES THREE BASIC PHYSICAL
- 3 CHARACTERISTICS: DURATION, MAGNITUDE, AND FREQUENCY. THE STUDY AREA FOR
- 4 NOISE INCLUDES THE AREA WITH THE POTENTIAL TO BE AFFECTED BY NOISE FROM THE
- 5 PROPOSED ACTION.

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- 6 A PERSON'S RESPONSE TO NOISE DEPENDS ON FACTORS SUCH AS THE SETTING, TIME
- 7 OF DAY, TYPE OF ACTIVITY BEING CONDUCTED WHEN THE NOISE OCCURS, WEATHER
- 8 CONDITIONS, AND THE SENSITIVITY OF THE INDIVIDUAL.
- 9 NOISE AFFECTS SEVERAL RESOURCE AREAS, AND IT IS DISCUSSED IN SEVERAL SECTIONS
- 10 OF THE EIS. THE ANALYSIS FOCUSES ON AREAS WITHIN WHICH NOISE AND SONIC
- 11 BOOMS WOULD BE MOST LIKELY TO BE DISTURBING OR IMPACTFUL. *

SLIDE 23 — NOISE: OVERVIEW

- 13 POTENTIAL NOISE EFFECTS COULD OCCUR FROM THE PROPOSED CONSTRUCTION OR
- 14 PROPOSED STATIC FIRE TESTS, LAUNCHES, AND LANDINGS AT LC-39A.
- 15 THIS SLIDE PRESENTS SOME NOISE EFFECTS THAT WOULD OCCUR UNDER THE
- 16 PROPOSED ACTION, INCLUDING LAND USE INCOMPATIBILITY, HIGH PERCENTAGES OF
- 17 SLEEP DISTURBANCE PREDICTED FROM SONIC BOOMS, AND HEARING LOSS RISK. THE
- 18 FOLLOWING SLIDES WILL GO INTO ADDITIONAL DETAIL ABOUT THESE EFFECTS.
- 19 THIS SLIDE ALSO PRESENTS AN OVERVIEW OF THE METHODOLOGY USED TO ANALYZE
- 20 NOISE EFFECTS. NOISE EFFECTS WERE ASSESSED AGAINST THE NO ACTION
- 21 ALTERNATIVE. WHICH REPRESENTS CURRENT ACTIVITIES AND OPERATIONS AT AND
- 22 AROUND LC-39A WITHOUT THE PROPOSED ACTION. ROCKET NOISE IS ALREADY A
- 23 NOTABLE, OCCASIONAL PART OF THE ACOUSTIC ENVIRONMENT IN THE STUDY AREA. *

SLIDE 24 — NOISE: SLEEP DISTURBANCE

- 2 SOME OPERATIONS ARE EXPECTED TO OCCUR LATE AT NIGHT (BETWEEN 10 PM AND 7
- 3 AM) AND WOULD HAVE AN INCREASED LIKELIHOOD OF DISTURBING SLEEP.
- 4 LAUNCH PROPULSION NOISE LEVELS WOULD BE ASSOCIATED WITH UP TO 14 PERCENT
- 5 OF PEOPLE BEING AWAKENED IF WINDOWS ARE OPEN, AND 10 PERCENT IF WINDOWS
- 6 ARE CLOSED. PROPULSION NOISE FROM LANDING EVENTS AND STATIC FIRE TESTS
- 7 WOULD PRODUCE LOWER NOISE LEVELS, RESULTING IN A SMALLER PERCENTAGE OF
- 8 PEOPLE BEING AWAKENED.

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- 9 SONIC BOOMS GENERATED DURING SUPER HEAVY BOOSTER LANDINGS WOULD
- 10 GENERATE NOISE LEVELS ASSOCIATED WITH UP TO 82 PERCENT OF PEOPLE BEING
- AWAKENED IF SLEEPING OUTDOORS OR IN STRUCTURES WITH MINIMAL NOISE
- 12 ATTENUATION, SUCH AS MOBILE HOMES. FOR STARSHIP LANDINGS IN THE SAME
- 13 SCENARIO UP TO 55 PERCENT OF THOSE EXPOSED COULD BE AWAKENED. TYPICAL
- 14 STRUCTURES PROVIDE UP TO 15 DECIBELS IN NOISE ATTENUATION, WITH A REDUCTION
- 15 IN THE PERCENTAGE OF PERSONS EXPOSED BEING AWAKENED. FOR BOOSTER
- 16 LANDINGS. UP TO 42 PERCENT OF PERSONS SLEEPING IN TYPICAL STRUCTURES
- 17 EXPOSED TO THE NOISE MAY BE AWAKENED, WHILE FOR STARSHIP LANDINGS, UP TO
- 18 22 PERCENT EXPOSED MAY BE AWAKENED.*

SLIDE 25— NOISE: STRUCTURAL DAMAGE

- 20 THERE WOULD BE A LOW PROBABILITY OF STRUCTURAL DAMAGE ON OR OUTSIDE THE
- 21 BOUNDARIES OF KSC AND CAPE CANAVERAL SPACE FORCE STATION OR CCSFS DUE TO
- 22 NOISE AND VIBRATIONS GENERATED BY THE PROPOSED ACTION.
- 23 DURING LAUNCHES, SUPER HEAVY BOOSTER LANDINGS, AND SUPER HEAVY BOOSTER
- 24 STATIC FIRE TESTS, COMMUNITIES OUTSIDE THE BOUNDARIES OF KSC AND CCSFS
- 25 WOULD EXPERIENCE NOISE LEVELS BETWEEN 111 AND 120 DECIBELS MAXIMUM
- 26 SOUND LEVEL OR LMAX.

- 1 SUSTAINED UNWEIGHTED NOISE LEVELS MORE THAN 111 DECIBELS ARE ASSOCIATED
- 2 WITH A 1 IN 1,000 PROBABILITY OF DAMAGE CLAIMS. NOISE LEVELS SLIGHTLY
- 3 EXCEEDING 120 DECIBELS LMAX, WHICH ARE ASSOCIATED WITH 1 IN 100 PROBABILITY
- 4 OF DAMAGE CLAIMS, WOULD AFFECT A SMALL NUMBER OF RESIDENCES ON MERRITT
- 5 ISLAND ONLY DURING LAUNCHES. NOISE LEVELS OF MORE THAN 130 DECIBELS LMAX
- 6 ARE ASSOCIATED WITH A SUBSTANTIAL RISK OF STRUCTURAL DAMAGE -- BUT NOISE
- 7 LEVELS WOULD NOT EXCEED 130 DECIBELS LMAX AT ANY LOCATIONS OUTSIDE THE
- 8 BOUNDARIES OF KSC AND CCSFS.

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- 9 SONIC BOOMS WOULD BE EXPECTED TO EXCEED 2 POUNDS PER SQUARE FOOT OR PSF,
- 10 A MAGNITUDE ASSOCIATED WITH A 1 IN 10,000 PROBABILITY OF BREAKAGE FOR A
- 11 LARGE WINDOW. THIS COULD INCLUDE PORTIONS OF TITUSVILLE, PORT SAINT JOHN,
- 12 MERRITT ISLAND, CAPE CANAVERAL, AND OTHERS.
- 13 IF ANY DAMAGE WERE TO OCCUR AS A RESULT OF SONIC BOOMS, IT WOULD BE
- 14 EXPECTED TO BE LIMITED TO LIGHTWEIGHT OR BRITTLE STRUCTURAL ELEMENTS. THE
- 15 FAA REQUIRES SPACEX TO MAINTAIN INSURANCE IN THE EVENT OF CLAIMS OF
- 16 STRUCTURAL DAMAGE. IN THE UNLIKELY EVENT THAT DAMAGE TO A STRUCTURE WERE
- 17 TO OCCUR BECAUSE OF STARSHIP-SUPER HEAVY OPERATIONS, PROPERTY OWNERS
- 18 WOULD CONTACT SPACEX DIRECLY TO SUBMIT CLAIMS. *

SLIDE 26— NOISE: HEARING LOSS RISK

- 20 SONIC BOOMS GENERATED DURING STARSHIP AND SUPER HEAVY BOOSTER LANDINGS
- 21 WOULD EXCEED 4 PSF IN SOME PRIVATELY OWNED PORTIONS OF MERRITT ISLAND AND
- 22 THE CITY OF CAPE CANAVERAL. HOWEVER, SONIC BOOM SOUND ENERGY IS PRIMARILY
- 23 AT LOW FREQUENCIES, WHICH DO NOT INTERACT STRONGLY WITH THE HUMAN
- 24 HEARING MECHANISM. DUE TO INFREQUENT EXPOSURE AND THE LIKELIHOOD THAT
- 25 PERSONS WILL BE INDOORS DURING SONIC BOOMS, THE RISK OF HEARING LOSS AS A
- 26 RESULT OF THE PROPOSED ACTION WOULD BE MINIMAL. *

SLIDE 27— NOISE: CONTINGENCY LANDING SCENARIO

- 3 THE MAJORITY OF SUPER HEAVY LANDINGS IN THE ATLANTIC OCEAN WOULD NOT BE
- 4 AUDIBLE ON SHORE. ONLY CONTINGENCY LANDINGS, ESTIMATED TO BE LESS THAN FIVE
- 5 PER YEAR, COULD EXCEED 1 PSF. THIS WOULD RESULT IN SOUND EVENTS BETWEEN 90 –
- 6 115 DECIBELS, BUT WOULD BE BRIEF, INFREQUENT, AND WOULD NOT EXCEED
- 7 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION OR OSHA HEARING
- 8 CONSERVATION THRESHOLDS.

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- 9 THE SUPER HEAVY BOOSTER CONTINGENCY LANDING AREA IS A MINIMUM OF FIVE
- 10 MILES OFFSHORE. BOOSTER CONTINGENCY LANDING NOISE LEVELS ARE GENERALLY
- 11 LESS THAN NOMINAL LANDING LEVELS ON LAND.
- 12 THE STARSHIP CONTINGENCY LANDING AREA IS A MINIMUM OF ONE MILE OFFSHORE
- 13 AND EXTENDS MORE THAN 1,000 MILES INTO THE OCEAN. LANDINGS FAR FROM SHORE
- 14 WOULD NOT BE AUDIBLE ON SHORE.
- 15 THE MAP ON THIS SLIDE SHOWS THE SMALL LAND AREAS THAT COULD
- 16 HYPOTHETICALLY BE AFFECTED BY A STARSHIP CONTINGENCY LANDING SONIC BOOM.
- 17 AREAS WITHIN THE BLUE DASHED LINE COULD HYPOTHETICALLY EXPERIENCE A SONIC
- 18 BOOM BETWEEN 1 AND 1.7 PSF. HOWEVER. THESE WOULD BE EXTREMELY RARE. *

SLIDE 28 — NOISE: ANNOYANCE AND LAND USE COMPATIBILITY

- 21 DURING OPERATIONS, WHICH INCLUDE STATIC FIRE TESTS, LAUNCHES, AND LANDINGS,
- 22 NOISE LEVELS WOULD REMAIN BELOW 65 DBA DNL AT ALL LOCATIONS OUTSIDE THE
- 23 BOUNDARIES OF KSC AND CCSFS.
- 24 THE MAP ON THE RIGHT SHOWS CUMULATIVE C-WEIGHTED DAY/NIGHT NOISE LEVELS,
- 25 OR CDNL. THE CDNL METRIC IS A VERSION OF THE DNL METRIC THAT IS SPECIFIC TO

- 1 SONIC BOOMS. SONIC BOOM TIME-AVERAGED NOISE LEVELS WOULD INCREASE SUCH
- 2 THAT ADDITIONAL LAND AREA IN TITUSVILLE, MERRITT ISLAND, CAPE CANAVERAL, AND
- 3 COCOA BEACH WOULD BE EXPOSED TO GREATER THAN 60 DECIBELS CDNL. PORTIONS
- 4 OF CAPE CANAVERAL AND MERRITT ISLAND WOULD BE EXPOSED TO LEVELS BETWEEN
- 5 65 AND 70 DECIBELS CDNL. RESIDENTIAL LAND USES AND SCHOOLS ARE CONSIDERED
- 6 INCOMPATIBLE AT THESE LEVELS, AND SENSITIVE PUBLIC USES, SUCH AS HOSPITALS
- 7 AND PLACES OF WORSHIP, ARE CONSIDERED COMPATIBLE ONLY IF SOUND
- 8 ATTENUATION PROVIDED BY THE STRUCTURE EXCEEDS MINIMUM VALUES. CERTAIN
- 9 OTHER LAND USES, SUCH AS OFFICES AND COMMERCIAL, ARE COMPATIBLE AT
- 10 GREATER THAN 65 DECIBELS CDNL ONLY IF ATTENUATION MINIMUMS ARE MET.
- 11 BASED ON FAA CRITERIA, INCREASED SUPERSONIC NOISE LEVEL FROM THE PROPOSED
- 12 ACTION WOULD RESULT IN SIGNIFICANT NOISE EFFECTS. INTERRUPTIONS OF ACTIVITIES
- 13 IN NEARBY COMMUNITIES BY NOISE WOULD BE RELATIVELY BRIEF, AND PROPOSED
- 14 MITIGATIONS, SUCH AS PUBLIC NOTIFICATIONS, COULD ASSIST IN REDUCING THE
- 15 PUBLIC'S PERCEPTION OF THE EFFECTS. *

SLIDE 29 — LAND USE IMPACTS

- 17 THE STUDY AREA FOR IMPACTS TO LAND USE INCLUDES LC-39A AT KSC AND THE
- 18 SURROUNDING LAND USES AND MANAGEMENT WITH POTENTIAL TO BE AFFECTED BY
- 19 THE PROPOSED PROJECT.

- 20 SOME LAND OUTSIDE THE BOUNDARIES OF KSC AND CCSFS WOULD BE EXPOSED TO
- 21 SONIC BOOM NOISE LEVELS EXCEEDING 60 DECIBELS CDNL, WHICH IS CONSIDERED
- 22 INCOMPATIBLE WITH SENSITIVE LAND USES SUCH AS RESIDENTIAL AREAS AND
- 23 SCHOOLS. THIS IS CONSIDERED A SIGNIFICANT EFFECT.
- 24 LAND USES WOULD NOT BE AFFECTED TO THE EXTENT THAT PUBLIC HEALTH OR SAFETY
- 25 WAS THREATENED. ADDITIONALLY, IT IS NOT ANTICIPATED THAT FIRE MANAGEMENT

- 1 PROGRAM ACTIVITIES WOULD SIGNIFICANTLY CHANGE IN THE AREA SURROUNDING
- 2 KSC DUE TO EXISTING AGREEMENTS WITH NASA, CCSFS, AND THE USFWS.
- 3 EFFECTS TO RECREATIONAL LAND USE IN THE SURROUNDING STUDY AREA WOULD
- 4 OCCUR DUE TO INCREASED NOISE EVENTS AND PUBLIC EXPOSURE, AS WELL AS
- 5 INCREASED ACCESS RESTRICTIONS, CLOSURES, AND THE ASSOCIATED CHANGES TO
- 6 USFWS AND NPS STAFF MANAGEMENT PRIORITIES ALTERED BY LAUNCHES. PLAYALINDA
- 7 BEACH COULD EXPERIENCE UP TO 60.5 CLOSURE DAYS PER YEAR. BEFORE ANY
- 8 CLOSURES ARE ENACTED, THE CLOSURE ACTIVITIES MUST BE REVIEWED AND
- 9 APPROVED BY THE NPS DIRECTOR AND THE ASSISTANT SECRETARY FOR FISH AND
- 10 WILDLIFE AND PARKS UNDER SECRETARIAL ORDER 3426. THIS WILL BE COORDINATED
- BETWEEN THE FAA, SPACEX, AND THE DEPARTMENT OF THE INTERIOR.
- 12 HOWEVER, THE FAA HAS NOT DETERMINED THESE EFFECTS TO BE SIGNIFICANT, AS THE
- NOISE AND CLOSURE EVENTS WOULD BE TEMPORARY AND WOULD NOT PERMANENTLY
- 14 PRECLUDE THE VIABILITY OR USE OF THE AREAS, AS SHOWN BY THEIR CURRENT
- 15 EXPOSURE TO FREQUENT LAUNCH-RELATED NOISE FROM BOTH KSC AND CCSFS. *

SLIDE 30 — DEPARTMENT OF TRANSPORTATION SECTION 4(F) IMPACTS

- 18 THE STUDY AREA WAS DEVELOPED USING A MAXIMUM A-WEIGHTED NOISE LEVEL TO
- 19 EVALUATE THE SHORT-DURATION, HIGH-INTENSITY NATURE OF LAUNCH AND LANDING
- 20 NOISE FROM LC-39A. THE FAA HAS DETERMINED THAT IT IS NOT REQUIRED TO PREPARE
- 21 A SECTION 4(F) EVALUATION FOR THIS PROJECT FOR MINWR, MANAGED BY THE
- 22 USFWS, OR CANA, MANAGED BY THE NPS BECAUSE BOTH MINWR AND CANA MEET THE
- 23 REQUIREMENTS OF THE "JOINT DEVELOPMENT EXCEPTION" PROVISION OF 23 CFR.
- 24 §774.11(i). THE SECTION 4(F) STUDY AREA THEREFORE FOCUSES ON AREAS OUTSIDE
- 25 MINWR AND CANA.

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- 1 FOR VIBRATION IMPACTS ON HISTORIC PROPERTIES, THE STUDY AREA IS THE EXTENT OF
- 2 THE 2 PSF OVERPRESSURE CONTOUR. FOR NOISE IMPACTS ON PUBLIC PARKS AND
- 3 RECREATIONAL AREAS, THE STUDY AREA IS THE EXTENT OF THE 60 DECIBEL CDNL
- 4 CONTOUR. THE NOISE IMPACTS ON WILDLIFE AND WATERFOWL REFUGES IS THE
- 5 EXTENT OF THE 1 POUNDS PSF OVERPRESSURE CONTOUR AND THE 60 DECIBEL CDNL
- 6 CONTOUR.
- 7 UNDER THE PROPOSED ACTION, CONSTRUCTION ACTIVITIES WOULD NOT INVOLVE USE
- 8 OF ANY SECTION 4(F) PROPERTY. CONSTRUCTION ACTIVITIES WOULD NOT RESULT IN
- 9 SUBSTANTIVE CHANGES TO THE VIEWSHED.
- 10 PROXIMAL PROPERTIES ARE ALREADY EXPOSED TO LAUNCH/LANDING NOISE AND
- 11 ACCESS LIMITATIONS ON A REGULAR BASIS. OPERATION OF THE PROPOSED ACTION
- 12 WOULD NOT RESULT IN CONSTRUCTIVE USE OF ANY SECTION 4(F) PROPERTY. *

13 | SLIDE 31 — BIOLOGICAL RESOURCES IMPACTS

- 14 THE STUDY AREA FOR BIOLOGICAL RESOURCES COVERS THE AREAS POTENTIALLY
- 15 AFFECTED BY CONSTRUCTION AND OPERATION UNDER THE PROPOSED ACTION. THIS
- 16 INCLUDES THE TERRESTRIAL, ESTUARINE, AND NEARSHORE AREAS AT AND AROUND LC-
- 17 39A, AS WELL AS THE OFFSHORE PORTIONS OF THE ATLANTIC OCEAN, PACIFIC OCEAN,
- 18 AND INDIAN OCEAN WHERE SUPER HEAVY BOOSTERS AND STARSHIPS COULD BE
- 19 EXPENDED OR LAND ON A DRONESHIP.
- 20 UNDER THE PROPOSED ACTION, THE FOLLOWING STRESSORS HAVE THE POTENTIAL TO
- 21 AFFECT BIOLOGICAL RESOURCES:
- 22 VEGETATION DISTURBANCE OR DESTRUCTION; NOISE AND VISUAL STIMULI;
- 23 VIBRATIONS; SONIC BOOMS; STRIKES OR COLLISIONS; DELUGE WATER AND PLUMES;
- 24 ARTIFICIAL LIGHTING; HAZARDOUS MATERIALS; INVASIVE SPECIES INTRODUCTION; AND
- 25 RESTRICTED ACCESS FOR MANAGEMENT AND MONITORING. *

SLIDE 32 — HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES IMPACTS

1	UNDER THE PROPOSED ACTION	EEEECTS TO HISTORICAL	VDCPILECTIONI
4	UNDER THE PROPUSED ACTION	. EFFECTS TO DISTONICAL	ANCHIECTURAL

- 5 ARCHAEOLOGICAL, AND CULTURAL RESOURCES ARE POSSIBLE, SIGNIFICANT IMPACTS
- 6 TO THESE RESOURCES ARE UNLIKELY BECAUSE OF THE INFREQUENCY OF DAMAGE TO
- 7 THESE KINDS OF RESOURCES WHEN EXPOSED TO SONIC BOOM OVERPRESSURE EVENTS.
- 8 AND VIBRATORY EFFECTS EXPECTED WITHIN THE STUDY APE AS THE RESULT OF THE
- 9 PROPOSED ACTION. HOWEVER, POORLY MAINTAINED STRUCTURES OR PREVIOUSLY
- 10 DAMAGED STRUCTURES MAY BE MORE SUSCEPTIBLE TO DAMAGE. THE LONG-TERM.
- 11 EFFECTS OF REPEATED SONIC BOOM OVERPRESSURE EVENTS ON SUBSURFACE
- 12 ARCHAEOLOGICAL SITES, IF ANY, ARE POORLY UNDERSTOOD.
- 13 NASA, AS THE LEAD AGENCY FOR NHPA CONSULTATION AND IN COORDINATION WITH
- 14 FAA, INTENDS TO CONTINUE SECTION 106 CONSULTATION WITH THE STATE HISTORIC
- 15 PRESERVATION OFFICE, FEDERALLY RECOGNIZED TRIBES, AND OTHER CONSULTING
- 16 PARTIES TO DEVELOP AND EXECUTE A PROGRAMMATIC AGREEMENT OR PA PURSUANT
- 17 TO 36 CFR SECTION 800.14(B). THE PA WILL INCLUDE ONGOING CONSULTATION AND
- 18 MONITORING EFFORTS, AND MITIGATION STRATEGIES TO RESOLVE ANY POTENTIAL
- 19 ADVERSE EFFECTS RESULTING FROM THE PROPOSED ACTION. *

SLIDE 33— MARITIME TRANSPORTATION IMPACTS

- 22 THE STUDY AREA FOR TRANSPORTATION IS LC-39A AND THE AREAS IN AND AROUND
- 23 KSC THAT COULD BE AFFECTED BY LAUNCHES, TEST OPERATIONS, AND
- 24 TRANSPORTATION.

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- 25 UNDER THE PROPOSED ACTION, LAUNCHES, LANDINGS, AND STATIC FIRE TESTS WOULD
- 26 REQUIRE SURVEILLANCE AND CLEARING OF CERTAIN MARITIME AREAS. THERE WOULD

- 1 BE NO CHANGES TO SIZES OF RNAS AS A RESULT OF STARSHIP-SUPER HEAVY LAUNCHES
- 2 AND REENTRIES. *

SLIDE 34 — MARITIME TRANSPORTATION: FAIRWAYS AND 2023 NOAA VESSEL TRAFFIC

5 COUNTS

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- 6 THE MAP ON THE LEFT OF THE SLIDE SHOWS FAIRWAYS AND 2023 VESSEL TRANSIT
- 7 COUNTS. THE MAP ON THE RIGHT OF THE SLIDE SHOWS VESSEL TRANSIT COUNTS.
- 8 ENTERING AND EXITING PORT CANAVERAL, TRANSIT EXITING AND ENTERING PORT
- 9 CANAVERAL IS CONSIDERED HIGH. *

SLIDE 35— AIRSPACE IMPACTS

- 11 THIS SLIDE SHOWS THE NOTIONAL, POTENTIAL AIRCRAFT HAZARD AREAS, OR A-H-A'S,
- 12 ASSOCIATED WITH LAUNCHES AND BOOSTER LANDINGS, AS WELL AS STARSHIP
- 13 REENTRIES AND RETURN TO LAUNCH SITE, THESE A-H-A'S DEFINE THE TEMPORARILY
- 14 CLOSED AIRSPACE THAT WOULD BE ESTABLISHED AND PUBLISHED THROUGH A NOTICE
- 15 TO AIRMEN PRIOR TO THE LAUNCH/REENTRY. THE LOCATION AND SIZE OF AIRSPACE
- 16 CLOSURES FOR COMMERCIAL SPACE OPERATIONS ALSO VARY WITH EACH MISSION
- 17 TYPE AND ARE INFLUENCED BY MULTIPLE FACTORS, INCLUDING PRIOR FLIGHT HISTORY.
- 18 THE SIZE OF AIRSPACE CLOSURES CAN GROW OR SHRINK AS RELIABILITY IS EITHER
- 19 DECREASED OR INCREASED WITH RESULTS AND ANALYSIS FROM EACH LAUNCH.
- 20 THE STUDY AREA FOR POTENTIAL AIRSPACE IMPACTS INCLUDES AIRWAYS OVER THE
- 21 ATLANTIC OCEAN, CARIBBEAN SEA AND THE AIRSPACE OF THE BAHAMAS, AS WELL AS
- 22 AIRWAYS OVER PORTIONS OF THE PACIFIC OCEAN, GULF OF AMERICA, AND THE
- 23 AIRSPACE OF SEVERAL CENTRAL AMERICAN COUNTRIES. *

SLIDE 36— AIRSPACE IMPACTS

- 2 UNDER THE PROPOSED ACTION, LAUNCH AND SUPER HEAVY BOOSTER RETURNS MAY
- 3 REQUIRE TEMPORARY CLOSURE OF AIRWAYS OVER THE ATLANTIC OCEAN AND AFFECT
- 4 THE AIRSPACE OF THE BAHAMAS

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- 5 STARSHIP REENTRY MAY REQUIRE TEMPORARY CLOSURE OF AIRWAYS OVER PORTIONS
- 6 OF THE PACIFIC OCEAN, GULF OF AMERICA, CARIBBEAN SEA, AND ATLANTIC OCEAN
- 7 AND AFFECT THE AIRSPACE OF SEVERAL CENTRAL AMERICAN COUNTRIES.
- 8 THERE MAY BE SIGNIFICANT AIRCRAFT REROUTING TO AVOID A-H-A'S. MULTIPLE
- 9 AIRPORTS MAY REQUIRE GROUND STOPS DUE TO OVERLYING A-H-A'S. DIVERSIONS AND
- 10 CANCELLATIONS MAY ALSO OCCUR. THE AVERAGE EXPECTED FLIGHT DELAY FOR
- 11 LAUNCHES AND BOOSTER LANDINGS IS APPROXIMATELY 40 MINUTES TO TWO HOURS.
- 12 FOR STARSHIP REENTRIES, APPROXIMATELY 40 MINUTES TO ONE HOUR. THE DELAY
- 13 COULD BE INCREMENTALLY GREATER BASED ON ANY DELAY OF THE START OF THE
- 14 REENTRY WITHIN THE ASSUMED 1-HOUR REENTRY WINDOW.
- 15 AFFECTED AIRPORTS IN FLORIDA COULD INCLUDE FORT LAUDERDALE/HOLLYWOOD
- 16 INTERNATIONAL AIRPORT, ORLANDO INTERNATIONAL AIRPORT, TAMPA
- 17 INTERNATIONAL AIRPORT, AND MIAMI INTERNATIONAL AIRPORT.
- 18 ALL LAUNCH AND REENTRY OPERATIONS WOULD COMPLY WITH NECESSARY
- 19 NOTIFICATION REQUIREMENTS, INCLUDING ISSUANCE OF NOTICES TO AIRMEN AND
- 20 IDENTIFICATION OF AHAS THAT ASSIST PILOTS IN SCHEDULING AROUND TEMPORARY
- 21 DISRUPTION OF FLIGHT ACTIVITIES.*

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SLIDE 37— STAKEHOLDER ENGAGEMENT SCHEDULE

- 24 THIS SLIDE DISPLAYS THE REMAINING MAJOR MILESTONES OF THE EIS SCHEDULE. THE
- 25 DRAFT EIS WAS PUBLISHED ON AUGUST 8, 2025. PUBLIC MEETINGS ARE BEING HELD IN-

- 1 PERSON ON AUGUST 26TH AND AUGUST 28TH, AND VIRTUALLY ON SEPTEMBER 3RD.
- 2 THE PUBLIC COMMENT PERIOD WILL CLOSE ON SEPTEMBER 22, 2025, AFTER WHICH
- 3 THE FAA WILL EVALUATE AND INCORPORATE COMMENTS INTO THE FINAL EIS. THE FAA
- 4 WILL THEN ISSUE A RECORD OF DECISION (ROD). *

SLIDE 38— COMMENTS ON THE DRAFT EIS

- 6 AS PREVIOUSLY DISCUSSED, THERE ARE MULTIPLE WAYS TO SUBMIT COMMENTS.
- 7 COMMENTS MAY BE PROVIDED VERBALLY DURING THIS MEETING TO A COURT
- 8 REPORTER, ONLINE AT REGULATIONS.GOV UNDER DOCKET ID: FAA-2024-1395 OR, BY
- 9 MAIL TO MS. EVA LONG, FAA ENVIRONMENTAL PROTECTION SPECIALIST, C/O LEIDOS,
- 10 2877 GUARDIAN LANE, VIRGINIA BEACH, VIRGINIA, 23452 OR SUBMITTED ON A
- 11 WRITTEN COMMENT FORM DURING A PUBLIC MEETING. THE FAA WILL CONSIDER AND
- 12 RESPOND IN THE FINAL EIS TO ALL SUBSTANTIVE COMMENTS RECEIVED OR POST-
- 13 MARKED BY NO LATER THAN SEPTEMBER 22, 2025.
- 14 YOU MAY ALSO SUBSCRIBE TO THE PROJECT MAILING LIST AND VIEW THE DRAFT EIS AT
- 15 THE PROJECT WEBSITE, LISTED AT THE BOTTOM OF THIS SLIDE. *

16 | SLIDE 39 — PROVIDING PUBLIC COMMENTS

- 17 THE FAA IS SEEKING COMMENTS FROM THE PUBLIC CONCERNING THE ACCURACY OF
- 18 THE DRAFT EIS, ADEQUACY OF THE ANALYSIS, NEW INFORMATION, ALTERNATIVES NOT
- 19 CONSIDERED THAT MEET THE PROJECT'S PURPOSE AND NEED, OR ADDITIONAL AREAS
- WHERE FURTHER CLARIFICATION IS NEEDED. ALL SUBSTANTIVE COMMENTS RECEIVED,
- 21 REGARDLESS OF FORMAT OR SUBMISSION DATE, WILL BE GIVEN FULL AND EQUAL
- 22 CONSIDERATION. *

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SLIDE 40— END TITLE SLIDE

24 THIS CONCLUDES THE VIDEO PRESENTATION. *

[END VIDEO PRESENTATION]

2 | SLIDE 41 — OPEN HOUSE (Speaker: Facilitator)

- 3 BEFORE MOVING INTO THE OPEN HOUSE PORTION OF OUR MEETING, I WOULD LIKE TO
- 4 REITERATE SOME INFORMATION MENTIONED EARLIER.
- 5 THE FAA IS SEEKING FEEDBACK FROM FEDERAL, STATE, AND LOCAL AGENCIES, TRIBES,
- 6 AND THE PUBLIC TO DEVELOP THE FINAL EIS. THE PURPOSE OF THIS MEETING IS TO
- 7 PROVIDE THE OPPORTUNITY TO LEARN ABOUT AND COMMENT ON THE PROJECT.
- 8 PUBLIC COMMENTS WILL BE PART OF THE OFFICIAL RECORD AND A SUMMARY WILL BE
- 9 INCLUDED IN THE FINAL EIS.

- 10 AS PREVIOUSLY DISCUSSED, COMMENTS MAY BE SUBMITTED IN MULTIPLE WAYS:
- 11 VERBALLY TO THE COURT REPORTER TODAY/TONIGHT, ONLINE AT REGULATIONS.GOV
- 12 UNDER DOCKET ID: FAA-2024-1395 OR, BY MAIL. THE FAA WILL CONSIDER IN THE FINAL
- 13 EIS ALL COMMENTS RECEIVED OR POST-MARKED BY NO LATER THAN SEPTEMBER 22,
- 14 2025. YOU MAY ALSO SUBMIT YOUR WRITTEN COMMENTS ON THE COMMENT FORMS
- 15 PROVIDED THIS AFTERNOON/EVENING. [POINT TO COMMENT TABLE.]
- 16 BEFORE INCLUDING YOUR ADDRESS, PHONE NUMBER, E-MAIL ADDRESS, OR OTHER
- 17 PERSONAL IDENTIFYING INFORMATION IN YOUR COMMENT, BE ADVISED THAT YOUR
- 18 ENTIRE COMMENT –INCLUDING YOUR PERSONAL IDENTIFYING INFORMATION MAY BE
- 19 MADE PUBLICLY AVAILABLE AT ANY TIME. WHILE YOU CAN ASK THE FAA IN YOUR
- 20 COMMENT TO WITHHOLD FROM PUBLIC REVIEW YOUR PERSONAL IDENTIFYING
- 21 INFORMATION, THE FAA CANNOT GUARANTEE THAT IT WILL BE ABLE TO DO SO.
- 22 YOU CAN BE ADDED TO THE PROJECT MAILING LIST BY INDICATING YOUR PREFERENCE.
- 23 ON A COMMENT FORM OR ON A REGISTRATION CARD PROVIDED AT THIS
- 24 AFTERNOON'S/EVENING'S MEETING.

- 1 THIS CONCLUDES THIS AFTERNOON'S/EVENING'S PRESENTATION. THE FAA
- 2 APPRECIATES YOUR PARTICIPATION.
- 3 FAA REPRESENTATIVES, I NOW INVITE YOU TO GO STAND BY YOUR DISPLAY BOARDS.
- 4 OK LADIES AND GENTLEMEN, WE WILL NOW BEGIN THE OPEN HOUSE PORTION OF THE
- 5 MEETING AND ACCEPT YOUR VERBAL/WRITTEN COMMENTS. THE MEETING IS
- 6 SCHEDULED TO END AT 3:00 [8:00] PM. PLEASE NOTE THAT CONVERSATIONS WITH
- 7 STAFF ARE NOT CONSIDERED FORMAL PUBLIC COMMENTS. THEREFORE, WE STRONGLY
- 8 ENCOURAGE YOU TO MAKE A FORMAL COMMENT VIA ONE OF THE METHODS
- 9 PREVIOUSLY DISCUSSED.
- 10 THANK YOU FOR ATTENDING. *
- 11 [OPEN HOUSE PORTION OF THE MEETING, STAY ON OPEN HOUSE MEETING SLIDE.]
- 12 | SLIDE 42 ENDING TITLE SLIDE