

Table of Contents

I.	Purpose and Need.....	I-1
1.1	Introduction.....	I-1
1.2	Background.....	I-1
1.3	Proposed Action.....	I-4
1.4	Purpose and Need	I-10
1.4.1	Sponsor’s Purpose and Need.....	I-10
1.4.2	Federal Purpose and Need.....	I-11
1.5	Requested Federal Actions	I-11
1.5.1	Federal Aviation Administration.....	I-11
1.5.2	Bureau of Land Management	I-11
1.6	Preliminary Construction Schedule	I-12
1.7	Organization of this EA	I-12
II.	Alternatives	II-1
2.1	Introduction.....	II-1
2.2	Alternatives Identification	II-1
2.2.1	Alternatives Identified from the Site Suitability Assessment.....	II-1
2.2.2	Alternatives Identified from Subsequent Planning Studies and Analysis.....	II-2
2.2.3	Other Alternatives	II-2
2.2.4	Summary of Alternatives Considered in this EA	II-3
2.3	Alternatives Screening Criteria.....	II-5
2.3.1	Level 1: Consistency with Nevada Revised Statutes, Chapter 495 (NRS 495).....	II-5
2.3.2	Level 2: Consistency with the Airport System Plan.....	II-5
2.3.3	Level 3: Ability to Accommodate Demand for Grand Canyon Helicopter Air Tours.....	II-5
2.4	Alternatives Not Carried Forward for Analysis of Environmental Consequences.....	II-6
2.4.1	Alternatives Involving Development of Heliport Facilities at a Site not Currently Developed for Aviation Uses.....	II-6
2.4.2	Alternatives Involving Development of Facilities at Existing Aviation Facilities	II-8
2.4.3	Use of Other Modes of Transportation.....	II-8
2.5	Alternatives Carried Forward for Analysis of Environmental Consequences.....	II-9
2.5.1	Construction and Operation of a Heliport at the South of Sloan Site (Proposed Action).....	II-9
2.5.2	No Action Alternative	II-13
2.5.3	Summary of Options Considered	II-13
2.6	Summary of Environmental Impacts of the Alternatives Carried Forward for Analysis of Environmental Consequences.....	II-15
2.7	Permits Required.....	II-15
2.8	Listing of Federal Laws and Regulations Considered	II-15

III. Affected Environment III-1

3.1 Introduction..... III-1

3.2 Study Areas..... III-1

3.2.1 Area of Disturbance..... III-1

3.2.2 Overflight Area..... III-2

3.2.3 Las Vegas Region..... III-2

3.3 Historical and Forecast Helicopter Air Tour Demand III-2

3.3.1 Historical Helicopter Air Tour Demand..... III-2

3.3.2 Current Helicopter Tour Operators III-5

3.3.3 Forecast Helicopter Air Tour Demand III-5

3.4 Physical Setting and Resources III-6

3.4.1 Climate III-6

3.4.2 Topography and Drainage III-6

3.4.3 Mineral Resources and Mining III-7

3.5 Noise III-7

3.5.1 McCarran International Airport..... III-8

3.5.2 2004 Ambient Noise Monitoring Program..... III-10

3.6 Compatible Land Use III-15

3.6.1 Existing Land Uses..... III-15

3.6.2 Planned Land Uses III-19

3.6.3 Zoning III-23

3.7 Demographics and Socioeconomic Profile III-26

3.8 Air Quality III-27

3.8.1 Air Quality Standards..... III-28

3.8.2 Attainment Status III-28

3.8.3 State Implementation Plans III-29

3.8.4 Ambient Air Quality Monitoring..... III-29

3.8.5 Existing Helicopter Emissions Inventory, McCarran International
Airport III-34

3.8.6 Climate Change/Greenhouse Gases III-35

3.9 Department of Transportation, Section 4(f) Lands III-36

3.10 Historic, Architectural, Archaeological, and Cultural Resources III-40

3.10.1 Proposed Heliport Site..... III-40

3.11 Fish, Wildlife, and Plants..... III-41

3.11.1 Environmental Setting III-41

3.12 Federally Listed Threatened and Endangered Species III-43

3.12.1 Environmental Setting III-43

3.13 Floodplains and Floodways III-44

3.13.1 Proposed Heliport Site..... III-45

3.13.2 McCarran International Airport..... III-45

3.14 Water Quality..... III-45

3.14.1 Groundwater III-45

3.14.2 Water Supply III-48

3.15 Hazardous Materials, Pollution Prevention, and Solid Waste III-48

3.15.1 Proposed Heliport Site..... III-48

3.15.2 McCarran International Airport..... III-49

3.16	Visual Resources.....	III-49
3.16.1	Proposed Heliport Site.....	III-50
3.16.2	Key Observation Points and Contrast Rating.....	III-50
3.17	Past, Present, and Reasonably Foreseeable Future Actions.....	III-51
IV.	Environmental Consequences	IV-1
4.1	Noise	IV-1
4.1.1	Summary of Findings	IV-2
4.1.2	Environmental Consequences	IV-3
4.2	Compatible Land Use	IV-12
4.2.1	Summary of Findings	IV-12
4.2.2	Environmental Consequences	IV-12
4.3	Socioeconomic Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risks	IV-17
4.3.1	Summary of Findings	IV-18
4.3.2	Environmental Consequences	IV-18
4.4	Air Quality	IV-24
4.4.1	Summary of Findings	IV-25
4.4.2	Environmental Consequences	IV-26
4.5	Areas of Critical Environmental Concern.....	IV-32
4.6	Department of Transportation, Section 4(f) Lands	IV-32
4.6.1	Summary of Findings	IV-34
4.6.2	Environmental Consequences	IV-34
4.7	Historic, Architectural, Archaeological, and Cultural Resources	IV-37
4.7.1	Summary of Findings	IV-37
4.7.2	Environmental Consequences	IV-37
4.8	Native American Religious Concerns.....	IV-39
4.9	Wilderness.....	IV-40
4.10	Fish, Wildlife, and Plants.....	IV-40
4.10.1	Summary of Findings	IV-41
4.10.2	Environmental Consequences	IV-41
4.10.3	Conservation/Mitigation Measures	IV-48
4.11	Federally-Listed Threatened or Endangered Species.....	IV-48
4.11.1	Summary of Findings	IV-49
4.11.2	Environmental Consequences	IV-49
4.11.3	Conservation/Mitigation Measures	IV-50
4.12	Invasive, Nonnative Species	IV-55
4.13	Floodplains and Floodways	IV-55
4.14	Water Quality.....	IV-56
4.14.1	Summary of Findings	IV-56
4.14.2	Environmental Consequences	IV-56
4.15	Hazardous Materials, Pollution Prevention, and Solid Waste	IV-58
4.15.1	Summary of Findings	IV-58
4.15.2	Environmental Consequences	IV-59
4.16	Light Emissions	IV-60
4.16.1	Summary of Findings	IV-60
4.16.2	Environmental Consequences	IV-60
4.17	Visual Resources.....	IV-61

4.17.1 Summary of Findings IV-61
4.17.2 Environmental Consequences IV-61
4.18 Natural Resources and Energy Supply..... IV-64
4.18.1 Summary of Findings IV-64
4.18.2 Environmental Consequences IV-64
4.19 Secondary (Induced) Impacts..... IV-65
4.19.1 Summary of Findings IV-65
4.19.2 Environmental Consequences IV-66
4.20 Construction Impacts IV-66
4.20.1 Summary of Findings IV-66
4.20.2 Environmental Consequences IV-67
4.20.3 Construction Best Management Practices IV-68
4.21 Consistency with Plans, Goals, and Policies..... IV-69
4.22 Cumulative Effects..... IV-69
4.22.1 Projects Considered in Cumulative Effects Analysis..... IV-69
4.22.2 Analysis of Cumulative Effects..... IV-71
4.22.3 Summary and Conclusions IV-79

V. References V-1

VI. List of Preparers and Agencies and Persons Consulted VI-1

Appendices

Appendix A Statutes
Appendix B Planning Timeline for a Southern Nevada Regional Heliport
Appendix C Supplement to Alternatives Analysis
Appendix D Helicopter Noise Analysis
Appendix E Land Use Plans and Zoning
Appendix F Air Quality Analysis
Appendix G Scoping
Appendix H Cultural Resources Consultation and Tribal Coordination
Appendix I Fish and Wildlife Consultation
Appendix J Visual Resources
Appendix K Agencies and Persons Consulted
Appendix L Public Involvement and Responses to Comments on Draft EA

List of Tables

Table II-1 Initial Alternatives Considered in the Environmental Assessment..... II-3

Table II-2 Alternatives Screening Analysis Results II-7

Table II-3 Summary of the Anticipated Environmental Impacts of the Proposed Action and the No Action Alternative II-15

Table II-4 Preliminary List of Permits Required for the Proposed Action II-20

Table II-5 List of Considered Federal Laws and Statutes..... II-21

Table II-6 List of Considered Executive Orders II-22

Table II-7 List of Considered FAA Orders, Advisory Circulars, and Other Guidance II-22

Table III-1 Forecast of Helicopter Air Tour Departures III-6

Table III-2 Summary of Noise Level Measurements – All Ambient Sources III-13

Table III-3 Suggested Land Use Compatibility Guidelines in Aircraft Noise Exposure Areas III-16

Table III-4 Household Income in Clark County and the United States III-26

Table III-5 Ethnicity of Residents in Clark County and the United States III-27

Table III-6 Federal and Clark County Ambient Air Quality Standards III-28

Table III-7 Ambient Air Quality Monitoring Locations Summary – 2004 Criteria..... III-33

Table III-8 McCarran International Airport – Existing Helicopter Emissions Summary (2004)..... III-35

Table III-9 Recreation, Conservation, Wilderness, Area of Critical Environmental Concern, and Resource Areas beneath the Overflight Area III-37

Table III-10 Local Parks and Recreation Centers beneath the Overflight Area..... III-39

Table III-11 Nevada State and BLM Sensitive Plant and Wildlife Species within Clark County, Nevada..... III-42

Table III-12 U.S. Fish and Wildlife Service Listed Endangered, Threatened, and Candidate Species within Clark County, Nevada III-44

Table III-13 Summary of Past, Present, and Reasonably Foreseeable Future Actions..... III-52

Table IV-1 Summary of Helicopter Noise Levels at Locations of Interest..... IV-11

Table IV-2 Ethnicity of Residents in the Las Vegas Region..... IV-19

Table IV-3 Annual Household Income in the Las Vegas Region IV-20

Table IV-4 Age of Residents in the Las Vegas Region..... IV-21

Table IV-5 Emissions Inventories – Proposed Action and No Action Alternative (tons per year) IV-26

Table IV-6 Pollutant Concentrations – Proposed Action IV-28

Table IV-7 Pollutant Concentrations – No Action Alternative IV-28

Table IV-8 General Conformity Applicability Analysis IV-30

Table IV-9 2017 Emissions Inventory – Hazardous Air Pollutants IV-31

Table IV-10 Predicted Noise Levels Properties Recommended for Consideration within the Sloan Canyon National Conservation Area IV-39

List of Exhibits

Exhibit I-1 Federal Land Transfer and Prescribed Flight Corridor over Sloan Canyon National Conservation Area..... I-3

Exhibit I-2 Proposed Action..... I-6

Exhibit I-3 Conceptual Heliport Layout Plan at the South of Sloan Site..... I-7

Exhibit I-4 Proposed Utility Extensions and Improvements I-8

Exhibit I-5 Preliminary Construction Schedule – First Phase..... I-13

Exhibit II-1 Initial Alternative Sites Considered for Heliport II-4

Exhibit II-2 Proposed Action: South of Sloan Site..... II-10

Exhibit II-3 Assumed Flight Corridors under the Proposed Action II-12

Exhibit II-4 Summary of Options Considered..... II-14

Exhibit III-1 Area of Disturbance III-3

Exhibit III-2 Overflight Area III-4

Exhibit III-3 Existing (2004) Aircraft Noise Exposure Contours and Generalized Existing Land Uses – McCarran International Airport III-9

Exhibit III-4 Existing (2004) Helicopter Noise Exposure Contours and Generalized Existing Land Uses – McCarran International Airport..... III-11

Exhibit III-5 Ambient Noise Monitor Locations III-12

Exhibit III-6 Generalized Existing Land Uses in the Vicinity of the Area of Disturbance III-17

Exhibit III-7 Generalized Existing Land Uses in the Vicinity of McCarran International Airport..... III-18

Exhibit III-8 Generalized Existing Land Uses in the Overflight Area..... III-20

Exhibit III-9 Clark County Planning Areas III-21

Exhibit III-10 Generalized Planned Land Uses in the Vicinity of the Area of Disturbance..... III-22

Exhibit III-11 Generalized Planned Land Uses in the Vicinity of McCarran International Airport..... III-24

Exhibit III-12 Generalized Planned Land Uses in the Overflight Area III-25

Exhibit III-13 Carbon Monoxide and Particulate Matter – Nonattainment Areas..... III-30

Exhibit III-14 8-Hour Ozone Nonattainment Areas..... III-31

Exhibit III-15 Ambient Air Quality Monitor Locations III-32

Exhibit III-16 Floodplain District Map – Area of Disturbance..... III-46

Exhibit III-17 Floodplain District Map – McCarran International Airport..... III-47

Exhibit IV-1 Existing and Potential Helicopter Flight Corridors to and from the Grand Canyon IV-4

Exhibit IV-2 2011 Helicopter Noise Exposure Contours over Generalized Existing Land Uses – Proposed Action IV-6

Exhibit IV-3 2017 Helicopter Noise Exposure Contours over Generalized Existing Land Uses – Proposed Action IV-7

Exhibit IV-4 2011 and 2017 Helicopter Noise Exposure Contours over Generalized Existing Land Uses – No Action Alternative..... IV-8

Exhibit IV-5 Noise Sensitive Areas in the Vicinity of the Overflight Area..... IV-10

Exhibit IV-6 2011 Helicopter Noise Exposure Contours over Generalized Planned Land Uses – Proposed Action IV-14

Exhibit IV-7 2017 Helicopter Noise Exposure Contours over Generalized Planned Land Uses – Proposed Action IV-15

List of Exhibits (continued)

Exhibit IV-8 2011 and 2017 Helicopter Noise Exposure Contours over Generalized
Planned Land Uses – No Action Alternative IV-16

Exhibit IV-9 Ethnicity of Residents in the Las Vegas Region..... IV-22

Exhibit IV-10 Income of Residents in the Las Vegas Region IV-23

Exhibit IV-11 National Conservation and Recreation Areas, Natural Areas, Local Parks, and
Areas of Critical Environmental Concern..... IV-33

Exhibit IV-12 Approximate Helicopter Flight Altitudes and Terrain Elevations Beneath the
Overflight Area IV-44

Exhibit IV-13 Key Observation Points IV-63

This page intentionally left blank