MASP INSTRUCTIONS

Pages 1-10 require total completion for regional office review and approval signatures (page 1 through aerial hazard analysis and map). Pages 11-14, which includes, pilot information, flight following, frequencies, MTR's, MOA's, crash rescue and medivac plans, may be completed as information becomes available. Partial completion of these pages is recommended during the submission process and all pages **shall** be completed prior to mission start.

RISK MATRIX INSTRUCTIONS

Risk assessment processes and risk decision approvals follow the guidelines set forth in the Aviation Risk Management Workbook, aka the "yellow book," National Aviation Safety Management System Guide, and the Operation Risk Management Guide. The risk outcomes on the risk assessment matrix (page 5) have been incorporated into the risk assessment worksheet's drop-down menus. Risk Assessment Category (RAC) outcomes are categorized as follows:

LOW MODERATE HIGH EXTREMELY HIGH

In no case will the overall risk of the mission be less than the highest specific factor. (Example: One extremely high, one high, and two moderate threats results in an <u>extremely high</u> risk assessment category outcome).

SIGNATURES

Route all MASP's through the Unit/Forest Aviation Officer for Regional Office review. Signature blocks on page 2 are listed in the order required for MASP approval. The MASP's will be routed back down through the Unit/Forest Aviation Officer (AO) for line officer approval. MASPs will be submitted as a word document and will be returned in PDF format for the approving official's signature.

All signature boxes up to the Aviation Officer will be signed in typed text:

Example: /s/ John M. Smith

The Regional Aviation Safety Manager (RASM) and the Regional Aviation Officer (RAO) will sign with link pass digital signatures, if possible, otherwise as stated above. Line officer signatures may sign with a wet signature or link pass digital signature at their discretion.

RETENTION AND FILING OF PLAN

MASPs that have been reviewed by the Regional Office will remain in Pinyon and archived by fiscal year. These plans are accessible by the Regional Office, Unit/Forest Aviation Officers, and select aviation managers. Plans approved by the line officer will be maintained in the dispatch office and referenced during flight. Retention of the safety plan by dispatch shall be three years. Retention of the plan and daily briefing sheets by the mission manager shall be three years.

Unit:			Sub l	<u>Jnit</u> :		
Agency	Requesting	Mission				<u>Calendar Year</u>
FS _	NPS E	вьм	Anticipated I	Date(s):	YES NO	
F'	WS BIA		Calendar Yea	ar:	YES NO	
STAT		IER 🗌			date below only if	
	Aircraft Typ		-		s) box is selected*	
Fixed	Rotor	UAS	Start Da	ate	End Date	MASP Objectives
						Training Resource LE&I Mission Incident
Mission p	repared by:			<u>Title</u> :		Date:
Mission re	eviewed by:	(OPTIONAL)) Unit Level:	<u>Title</u> :		<u>Date</u> :
	eviewed by:	(OPTIONAL)) Regional	<u>Title:</u>		<u>Date</u> :
Level:						
Mission ro	eviewed by:	(REQUIRED)) Aviation	<u>Title</u> :		<u>Date</u> :
onicer.						
Mission re	eviewed by:	(REQUIRED)) RASM:	<u>Title</u> :		<u>Date</u> :
Mission reviewed By: (REQUIRED) RAO:			Title:		<u>Date</u> :	
	nd Risk Asse D) - Line Off	essment app icer:	roved by:	<u>Title</u> :		<u>Date</u> :

* Participant's qualifications and responsibilities shall be verified and discussed during daily briefing*

Alternate Aviation Manager (IAW IAT Guide):
sion Name
sion Name

Check all that apply, if name is unknown, add information as it becomes available *Leave text fields blank if unknown*									
All coopera	ators require an annual ap	proval letter onboard except DOJ aircraft							
Cooperator:	Agency:								
Vendor:		Military:							
	Ot	ner:							
		_							
Rotor Wing:	Type One:	Type Two: Type Three:							
*Document additio	nal requirements beyond	standard typing in aircraft justification and on the							
re	source order* (performan	ce capabilities, equipment, etc.).							
Fixed Wing:	Single Engine	Twin Engine							
*Document mission r	needs for turbine, twin-en	gine, air conditioning, high or low wing, pressurized							
cabin, radio pac	kage, etc. in the aircraft ju	stification section and on the resource order.*							
UAS:	Fixed Wing	Rotory Wing (VTOL)							
·		rmation as it becomes available. All information shall							
be filled out prior to m	ission start.								
Unknown CWN:	l	Jnknown EU: 🗌							
Vendor:	1	FAA Registration #:							
Make:	1	Model:							
Carded for Mission:	YES NO	Card Expiration Date:							
Aircraft Color Scheme	:								
•		ring process, ensure CWN inspection sheet has been ata card is on file prior to mission start. **							
	st Information: Check un	known if unable to provide accurate or estimated							
information.		Fating at a d Flight Harm Coats							
Procurement Type: Unknown		Estimated Flight Hour Cost:							
		Unknown							
Missioned Flight Hour	s:								
Unknown		Estimated Miscellaneous Cost(s):							
Charge Code:		Unknown							
Unknown									

UAS Missions Only

	ge 12.
UAS Crew Leader:	Contact Number:
UAS Data Specialist (1):	Contact Number:
UAS Data Specialist (2):	Contact Number:
UAS Visual Observer (1):	Contact Number:
UAS Visual Observer (2):	Contact Number:
Additional Crew:	Contact Number:
TFR Information:	
Airspace Authorization:	
☐ Part 107 ☐ 107/LAANC ☐ SG	I Waiver
Authorization Comments -	
Lost Link and Flyaway Procedures-Protocols:	
Special Consideration-Safety Concerns-Comments Sec	etion:

Risk assessment must be completed prior to mission approval

Risk assessment hazards shall be reassessed prior to starting the mission, see FRAT

**Ensure appropriate management level for approval **

**See the National Aviation Safety Management System Guide, Yellow Book, and ORM guide for additional guidance with Risk Assessments

**This Risk Assessment does not negate the requirement to complete a FRAT prior to flight. **

Diale A consequent Adaptivity		Probability Likelihood of Mishap if Hazard is Present										
KISK	Assessment Matrix	Almost Certain (Continuously experienced)	Likely (Will occur frequently)	Possible (Will occur several times)	Unlikely (Remotely possible but not probable)	Rare (Improbable; but has occurred in the past)						
es S	Catastrophic (Imminent and immediate danger of death or permanent disability; major property or facility damage; loss of critical system or equipment)	Extremely High	Extremely High	Extremely High	High	Moderate						
nsequence Mishap Occu	Critical (Permanent partial disability, temporary total disability; moderate environmental damage; extensive damage to equipment)	Extremely High	Extremely High	High	Moderate	Moderate						
Severity/ Consequences Consequence if Mishap Occurs	Moderate (Hospitalized minor injury, reversible illness; minor damage to equipment, property or the environment)	High	High	Moderate	Low	Low						
S	Negligible (First aid or minor medical treatment; little or no property or environmental damage)	Moderate	Moderate	Low	Low	Low						

Risk Assessment Code	Severity of Consequences
Extremely High	 Complete or near complete failure to meet objective Major property or facility damage Death or permanent total disability Severe environmental damage Loss of major or critical system or equipment
High	Significantly degraded capability for meeting the objective or accomplishing the project/incident/work activity Injury that results in permanent partial disability, or temporary total disability lasting more than three months Serious environmental damage
Moderate	 Degraded capability for meeting objective or accomplishment of the project/fire operation Lost days due to injury or illness not exceeding three months Moderate damage to property or the environment
Low	 No adverse impact to meeting objective or accomplishment of the project/fire operation Little or no medical treatment required Little or no damage to equipment, systems, property or environment

	Risk Decision Authority									
Risk Level	Fire	Mission								
Extremely High	Incident Commander or Operations Sections Chief	Line Officer								
High	Incident Commander or Operations Sections Chief	Line Officer								
Moderate	Air Operations Branch Director	Supervisor or Lead								
Low	Base Manager	Individual								

	SAFETY MA	NAGEM	ENT SY	STEM A	SSESSMENT AND MITIGATION			
System Being Evaluated:		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level

	SAFETY MA	NAGEM	ENT SY	STEM A	SSESSMENT AND MITIGATION			
System Being Evaluated:		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level

	SAFETY MA	NAGEM	ENT SY	STEM A	SSESSMENT AND MITIGATION			
System Being Evaluated:		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level

	SAFETY MA	NAGEM	ENT SY	STEM A	SSESSMENT AND MITIGATION			
System Being Evaluated:		Pre Mitigation				Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level

	SAFETY MAI	NAGEM	ENT SYS	STEM A	SSESSMENT AND MITIGATION			
System Being Eva	aluated:	Pre	Pre Mitigation			Post Mitigation		
Sub System(s)	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
Final Assessment: Low		Date:			Name:			
	Add Ad	dditiona	I Rows	to Risk	Assessment as Necessary			

Aerial Hazard Analysis and map: Provide a written analysis of aerial hazards surrounding the mission area

in this box, e.g. towers, wires, sloping terrain, dust, proximity to airports, confined landing zones, etc. Replace the blue box below with a hazard map or include map at the end of the MASP.					

Aircraft Performance Planning:

The pilot is responsible for the accurate completion of load calculations or PPC (military performance planning). Trained personnel shall ensure that aircraft scheduled are capable of performing the mission(s) safely and within the capabilities of the aircraft selected. The helicopter or flight manager shall ensure that manifests, load calculations, weight & balance are completed properly using accurate environmental and aircraft data. Reference SHO chapter 7 or chapter 70 of the Military Use Handbook for additional information.

Personal Protective Equipment: *Always refer back to current ALSE, SHO, and manual direction*						
	Personnel protective equipment requirements. NOTE: Agency employees must be informed of the increased					
Type of Operation- Check applicable	personal hazard that is associated with wearing non-fire					
boxes that may apply to mission or	resistant clothing or footwear when the full complement of					
mission	PPE is not worn.					
	The MASP for the project must document PPE exception(s)					
	and in accordance with FSH 5709.16, Chapt 30, 36.53b.					
Rotor Wing Ground Operations	Fire resistant clothing, hard hat w/chin strap or SPH-5 flight helmet or other approved model, fire resistant and/or leather gloves, all leather boots, eye protection, hearing protection. *Refer to the Interagency Aerial Ignition Guide for additional ground operation requirements.*					
☐ Rotor Wing	Fire resistant clothing, approved flight helmet, hard hat w/chin strap, fire resistant and/or leather gloves, approved leather or flight boots, eye protection, hearing protection. Additional personnel restraints needed in the helicopter pending type of mission. * Refer to appropriate guides. * Charter flights, (non-agency controlled mission), shall comply with 14 CFR 135 requirements.					
☐ Doors Off Flight(s)	Personnel will remain seated and inside fuselage during all flights, approved secondary restraint harness for doors off flights (only for PLDO, HRAP, HRSP, Aerial Photography, IR Operator, ACETA Gunner, Cargo Letdown, Short Haul Spotter, Cargo Free Fall Operations in type 3 helicopter) * Refer to appropriate guides*					
☐ Cargo Free Fall Operations	Fire resistant clothing, SPH-5 flight helmet or other approved model, fire resistant and/or leather gloves, all leather boots, eye protection, hearing protection. Additional qualifications, compliance with rotorcraft manual and approved restraint requirement apply. * Refer to SHO chapter eleven for additional details. *					
Fixed Wing	Refer to current IASG, ALSE and 5700 manual directions for PPE requirements.					

Helicopter or fixed Wing Pilot Information: Fixed wing: use "other" box and state approved mission(s). Any unknown information shall be added after signature approvals. All personnel shall be qualified for mission or designated as a trainee with appropriate oversight. Pilot Name (P1): PIC/Primary **Pilot Phone Number:** Pilot Name (P2): Co-Pilot/Relief **Pilot Phone Number: Pilot Carded For Mission:** Yes No Pilot Card (P1) Expiration Date: Charter Pilot 135 Certificate and FAR's Apply ** Use of charter pilot requires regional forester Pilot Card (P2) Expiration Date: approval** Check all boxes that apply to pilot's carding below: P1 P2 **Low-Level Recon & Survey Designated "Pilot Trainer"** P1 P2 Helitack-Passenger Transport P1 P2 "Trainee Only" Pilot P1 P2 P1 P2 External Load (Belly Hook) Short Haul LE SAR P1 P2 Water-Retardant Delivery P1 P2 Float Operations (Fixed) P1 P2 Longline VTR (150') P1 P2 **Platform Landings-Offshore** P1 P2 Snorkel: VTR Mirror P1 P2 **Vessel Landings** P1 P2 P1 P2 P1 P2 **Mountainous Terrain Flying NVG Operations** Aerial Ignition (PSD) P1 P2 **ACETA Net Gun (All ACETA)** P1 P2 Aerial Ignition (Torch) P1 P2 **ACETA Eradication** P1 P2 P1 P2 P1 P2 **Rappel Operations** ACETA (Herding) P1 P2 P1 P2 **Cargo Letdown ACETA Darting-Paintball** P1 P2 Snow Operations (Deep Snow) P1 P2 **STEP** P1 P2 Hoist P1 P2 Other UAS P1 P2

Flight Following And Frequencies:								
Confirm frequencies prior to flight								
FAA Flight Plan (chartered aircraft non-agency-controlled mission) no frequencies required								
	Chartered 135 operator is responsible for communications and flight plan							
Flight Following		AFF		•		Caircraft desk)		
	(Agency-owned					on) 🔛		
FAA Flight Plan: (Charter aircraft non-agency controlled mission)								
FIVI Receive:	I Receive: FM Transmit:			RX:				
						TX:		
FM Receive:		FM Trans	mit:			RX:		
						TX:		
FM Receive:	M Receive: FM Transmit: RX:			RX:				
					TX:			
AM Receive:		AM Transmit:				No Tone		
Aviation Manager will coordinate Temporary Flight Restrictions (TFR) with dispatch if needed Military Training Route(s) (MTR'S) or Military Operating Area(s) (MOA'S)								
Aviation Manager shall confirm deconfliction in these routes and areas prior to the flight with dispatch or other approved local methods.								
Deconfliction will be discussed prior to mission start. Add Additional MTR-MOA information to the end of the document if necessary.								
MTR-MOA	Route Legs-Altitudes		Activity		Time Time Zon			Zone
			Hot Cold		Start: Stop:		итс [
			N/A				Local	
			Hot Cold		Start:		итс	
			N/A		Stop:		Local	

Crash Rescue/Medivac Plan	n: Additional medical information	n attached?	YES NO			
General Instructions (in the event of an incident): Mission site duties and actions to be coordinated through dispatch in accordance with local search & rescue (SAR) and emergency crash rescue plan(s). These items will be discussed and recorded during the daily safety briefing.						
Specified crash rescue duties will be assigned to ground operations personnel each day before flights of any kind. Crash rescue and first aid equipment will be located near the helicopter operations site, and equipment's location made known to all personnel. Information and instructions will be sent/received through the local dispatch office or communications.						
EMT(s) on site: YES	NO 🗌					
Names:						
First responder(s) on site:	YES NO NO					
Names:						
Available medivac helicopt	ers: YES NO	UNKNOWN [
*Unknown: Select if medivac helicopter won't be ordered for the mission or incident prior to need. The helicopter will be ordered on demand through the dispatch process. Dispatch will provide medivac ship call sign or tail number, including capabilities and contact information. *						
Medivac helicopter on site	? YES NO					
Level of care medivac person	onnel can provide: ALS	BLS	Unknown 🗌			
FAA Tail #(s)	Contact Information:					
Hoist/Rappel/Extraction Capable? YES NO						
Check all that apply: Hoist Rappel Short Haul						
MEDICAL FACILITY	Name/Location/Helipad Inform	Name/Location/Helipad Information H				
Latitude	Longitude	Contact Free	q.			
MEDICAL FACILITY	MEDICAL FACILITY Name/Location/Helipad Information					
			YES NO			
Latitude	Longitude	q.				
NEAREST BURN FACILITY	Name/Location/Helipad Inform	Name/Location/Helipad Information				
Latitude	Longitude	Contact Free	n			

		Personnel will remain seated and inside fuselage during all flights, approved secondary restraint harness for doors off flights (only for PLDO, HRAP, HRSP, Aerial Photography, IR Operator, ACETA Gunner, Cargo Letdown, Short Haul Spotter, Cargo Free Fall Operations-type 3 helicopter) * Refer to appropriate guides*						
Doors Off or Doors Open Flig	ght(s)	**Safety Alert IASA 18-03 language**						
	"Agency personnel involved in any public aircraft operations mission that require aircraft doors to be removed prior to flight, or open during flight, shall receive hands-on secondary restraint refresher training prior to conducting flight operations".							
Doors Off or Open Operations che	cklist:	**All items s	hall be covered	and signed f	or prior to	operations**		
Aircraft connection point and								
Proper donning and adjustment of secondary restraint system.								
Have an understanding of the	secon	idary restraint	interaction wi	th FAA appro	oved seat be	elts.		
Potential of secondary restrain		•		• • •				
Know location and use of seco								
Perform buddy–check and Pilo	•		•		efore flight			
Practice egress with secondar			•					
Know location and use of resc	•	·	ease meenams	ii ana rancti	on or sears	Cit.		
Know location and use of resc	ue Kili	iie.						
Vendor Name: Aircraft Model: A			Aircraft N	1ako:	ΕΛΛ#:	_		
Vendor Name:	AllCi	art iviouei.	AllCraft N	riake.	FAA#:			
Aviation Manager:	Date	:	Pilot:		Date:			
<u> </u>	I				1			
Participants Name		Date	Partic	Participants Name:				

^{**}Use back of this form if needed for additional participants name and date.**