



I BRIGADA AÉREA
Departamento Administrativo y Financiero
Jefatura

Base Aérea Silvio Pettirossi, 28 abril de 2025

SEÑORES
HELIPOWER S.A.

PRESENTE:

Tengo el agrado de dirigirme a Ustedes con el objeto de solicitar cotizaciones de bienes y/o servicios, los cuales serán utilizados en el marco del proceso de Licitación Pública Nacional para la Adquisición del Servicio de Mantenimiento y Reparación de Aeronaves BELL 407 GXI, correspondiente al Ejercicio Fiscal 2025.

Se adjunta planilla de necesidades.

Esperando una respuesta favorable le saludo atentamente.




MARIA PERACTA ALVARENGA
1º AVC – JEFA DE ADQUISICIONES



I BRIGADA AÉREA

"CONTRATACIÓN DE SERVICIO DE MANTENIMIENTO Y REPARACIÓN DE AERONAVE BELL 407 Gxi"

LISTA DE NECESIDADES

SERVICIO DE MANTENIMIENTO Y REPARACIÓN DE AERONAVE BELL 407 Gxi

GRUPO 1 - INSPECCIONES PROGRAMADAS

ITEM	DESCRIPCION DEL BIEN	UNIDAD DE MEDIDA	PRESENTACIÓN	CONTRATO ABIERTO	CANTIDAD	PRECIO UNITARIO
1	<p>INSPECCIÓN PROGRESIVA - EVENTO N.º 1 / INSP. 50 HS PLACARDS AND MARKINGS EXAMINE THE PLACARDS, DECALS, AND MARKINGS. MAKE SURE YOU CAN READ THEM. THEY ARE APPLIED CORRECTLY, AND THEY ARE IN AGREEMENT WITH THE APPLICABLE CONFIGURATION OF YOUR HELICOPTER. MAIN ROTOR SYSTEM - 1. EXAMINE THE MAIN ROTOR SYSTEM FOR CONDITION AND SECURITY. EXAMINE THE COMPONENTS AS FOLLOWS TAIL ROTOR ASSEMBLY - 1. DO A TORQUE CHECK OF THE TAIL ROTOR ASSEMBLY MAST NUT (560 TO 580 INCH-POUNDS (64 TO 65 NM)) TAIL ROTOR ASSEMBLY - EXAMINE THE TAIL ROTOR ASSEMBLY FOR GENERAL CONDITION AND SECURITY DIRECTIONAL CONTROLS - 1. DO A TORQUE CHECK OF THE BOLTS (60 TO 80 INCH-POUNDS (6.7 TO 9 NM)) THAT ATTACH THE TAIL ROTOR PITCH LINK ASSEMBLIES TO THE TAIL ROTOR PITCH HORNS.</p>	UNIDAD	EVENTO	POR MONTO	1	
2	<p>INSPECCIÓN PROGRESIVA - EVENTO N.º 2 / INSP. 100 HS EXAMINE THE PLACARDS, DECALS, AND MARKINGS. MAKE SURE YOU CAN READ THEM. THEY ARE APPLIED CORRECTLY, AND THEY ARE IN AGREEMENT WITH THE APPLICABLE CONFIGURATION OF YOUR HELICOPTER. AIRFRAME - 1. EXAMINE THE FORWARD AND THE TRANSMISSION COWLINGS FOR CONDITION. 2. EXAMINE THE UPPER INLET COWLINGS FOR CONDITION. 3. EXAMINE THE ENGINE AIR INLET COWLING FOR CONDITION. EXAMINE THE COMPONENTS AS FOLLOWS. CONTROLS - 1. EXAMINE ALL OF THE CONTROL TUBES, BELLCRANKS, AND THE SUPPORTS FOR CONDITION, SECURITY, AND CORRECT OPERATION. SWASHPLATE ASSEMBLY - 1. EXAMINE THE SWASHPLATE AND SUPPORT FOR CONDITION AND SECURITY. HYDRAULIC - 1. EXAMINE THE HYDRAULIC SYSTEM FOR CONDITION, LEAKS AND SECURITY. EXAMINE THE COMPONENTS TRANSMISSION AND PYLON ASSEMBLY - 1. EXAMINE THE PYLON ASSEMBLY FOR CONDITION AND SECURITY. EXAMINE THE COMPONENTS</p>	UNIDAD	EVENTO	POR MONTO	1	
	<p>INSPECCIÓN PROGRESIVA - EVENTO N.º 3 / INSP. 150 HS EXAMINE THE PLACARDS, DECALS, AND MARKINGS. MAKE SURE THAT YOU CAN READ THEM. THEY ARE APPLIED CORRECTLY, AND THEY ARE IN AGREEMENT WITH THE APPLICABLE CONFIGURATION OF YOUR HELICOPTER. ENGINE - 1. EXAMINE THE ENGINE COWLING AND THE DOORS FOR CONDITION AND SECURITY. EXAMINE THE ENGINE FOR CONDITION, LEAKS, AND SECURITY. 3. EXAMINE THE FIREWALLS FOR CONDITION AND SECURITY. 4. EXAMINE THE ENGINE PAN DRAINS. MAKE SURE THAT THEY ARE NOT CLOGGED. RESTORE BROKEN OR MISSING SEALANT FROM ENGINE PAN. 5. EXAMINE THE ENGINE CONTROLS FOR CONDITION, CORRECT OPERATION, AND SECURITY. EXAMINE THE COMPONENTS AS FOLLOWS. ENGINE TO TRANSMISSION DRIVESHAFT - 1. EXAMINE THE ENGINE TO TRANSMISSION DRIVESHAFT FOR CONDITION AND SECURITY. EXAMINE THE COMPONENTS. TAIL ROTOR FORWARD SHORT SHAFT ASSEMBLY - 1. EXAMINE THE SHORT SHAFT FOR CONDITION AND SECURITY. 2. EXAMINE THE DISC PACK COUPLINGS. 3. DO A TORQUE CHECK OF THE DISC PACK COUPLING ATTACHMENT HARDWARE (150 TO 180 INCH-POUNDS (17 TO 20 NM)). 4. EXAMINE THE FLYWHEEL FOR CONDITION AND SECURITY (IF INSTALLED). FREEWHEEL ASSEMBLY 1. EXAMINE THE FREEWHEEL ASSEMBLY FOR CONDITION, LEAKS, AND SECURITY. 2. EXAMINE THE FREEWHEEL CHIP DETECTOR FOR METAL PARTICLES. EXAMINE THE ELECTRICAL CIRCUIT OF THE CHIP DETECTORS FOR CONTINUITY. ROTOR BRAKE DISC 1. EXAMINE THE ROTOR BRAKE DISC FOR CONDITION AND SECURITY. STARTER-GENERATOR (206-062-200) - 1. REMOVE AND EXAMINE THE STARTER-GENERATOR FOR CONDITION. EXAMINE THE COMPONENTS. 2. EXAMINE THE DUCT AND THE CLAMP FOR CONDITION AND SECURITY. PITCH CHANGE CONTROL 1. EXAMINE THE TAIL ROTOR PITCH CONTROL MECHANISM FOR CONDITION AND SECURITY. EXAMINE THE COMPONENTS</p>	UNIDAD	EVENTO	POR MONTO	1	
4	<p>INSPECCIÓN PROGRESIVA - EVENTO N.º 4 / INSP. 200 EXAMINE THE PLACARDS, DECALS, AND MARKINGS. MAKE SURE YOU CAN READ THEM. THEY ARE APPLIED CORRECTLY, AND THEY ARE IN AGREEMENT WITH THE APPLICABLE CONFIGURATION OF YOUR HELICOPTER. AIRFRAME - 1. EXAMINE THE AFT FAIRING FOR CONDITION. 2. EXAMINE THE AFT TOP DECK FOR CONDITION, LEAKS AND SECURITY. OIL SYSTEM - 1. EXAMINE THE ENGINE/TRANSMISSION OIL COOLING SYSTEM FOR CONDITION, LEAKS, AND SECURITY. OIL SYSTEM - 2. EXAMINE THE COMPONENTS AFT SHORT SHAFT ASSEMBLY - 1. EXAMINE THE SHORT SHAFT FOR CONDITION AND SECURITY. 2. EXAMINE THE DISC PACK COUPLINGS FOR CONDITION. 3. DO A TORQUE CHECK OF THE DISC PACK COUPLING ATTACHMENT HARDWARE (150 TO 180 INCH-POUNDS (17 TO 20 NM)). TAILBOOM STRUCTURE - 1. EXAMINE THE TAIL ROTOR DRIVESHAFT COVER AND THE GEARBOX COWLING FOR CONDITION AND SECURITY. 2. EXAMINE THE TAILBOOM ASSEMBLY FOR CONDITION AND SECURITY. TAIL ROTOR DRIVESHAFT 1. EXAMINE THE TAIL ROTOR DRIVESHAFT FOR CONDITION AND SECURITY. 2. EXAMINE THE DRIVESHAFT SEGMENT ASSEMBLIES FOR ANY NOTICEABLE ROTATIONAL OR AXIAL (FORE AND AFT) PLAY BETWEEN THE ADAPTER AND THE TAIL ROTOR DRIVESHAFT, AT ALL FOUR LOCATIONS. TAIL ROTOR GEARBOX 1. DO A TORQUE CHECK OF THE TAIL ROTOR GEARBOX ATTACHMENT NUTS (140 TO 160 INCH-POUNDS (16 TO 18 NM)). 2. EXAMINE THE TAIL ROTOR GEARBOX FOR CONDITION, LEAKS, AND SECURITY. 3. EXAMINE THE CHIP DETECTOR OF THE TAIL ROTOR GEARBOX FOR METAL PARTICLES. 4. EXAMINE THE ELECTRICAL CIRCUIT OF THE CHIP DETECTOR FOR CONTINUITY. 5. EXAMINE TAIL ROTOR GEARBOX OUTPUT SHAFT AT CROSSHEAD SEAL SLIDING AREA FOR WEAR AND CORROSION. PITCH CHANGE CONTROL 1. EXAMINE THE TAIL ROTOR PITCH CONTROL MECHANISM FOR CONDITION AND SECURITY. EXAMINE THE COMPONENTS. ELECTRICAL 1. EXAMINE ALL VISIBLE ELECTRICAL COMPONENTS, WIRES, CABLES, AND CONNECTORS IN THE AREA OF THE TAILBOOM FOR CHAFING, AND GENERAL CONDITION AND SECURITY. 2. VERIFY NAVIGATION LIGHTS AND ANTI-COLLISION LIGHT FOR OPERATION, CONDITION, AND SECURITY. 3. EXAMINE ANTENNAS FOR CONDITION AND SECURITY. ELECTRICAL GROUND RUN 1. COMPLETE A GROUND RUN AT 100% NR TO CHECK FOR LEAKS AND CONFIRM SYSTEM OPERATION</p>	UNIDAD	EVENTO	POR MONTO	1	
5	<p>300 HOUR OR 12 MONTH INSPECTION FUEL SYSTEM - 1. EXAMINE THE AUXILIARY FUEL TANK INSTALLATION FOR CONDITION AND SECURITY</p>	UNIDAD	EVENTO	POR MONTO	1	



6	600 HOUR OR 12 MONTH INSPECTION ROTOR HUB AND BLADE - 1. REMOVE MAIN ROTOR BLADES FROM THE MAIN ROTOR HUB ASSEMBLY 2. REMOVE OIL AND GREASE FROM THE MAIN ROTOR HUB, BLADES, AND BLADE BOLTS WITH CLEAN CLOTH (C-516) DAMPENED WITH ALIPHATIC NAPHTHA (C-305) OR DRYCLEANING SOLVENT (C-304). 3. CLEAN MAIN ROTOR HUB AND BLADES WITH CLEANING COMPOUND (C-318). THOROUGHLY RINSE WITH FRESH WATER AND DRY WITH CLEAN CLOTHS. 4. EXAMINE MAIN ROTOR HUB AND BLADES FOR EVIDENCE OF CORROSION. PAY PARTICULAR ATTENTION TO THE SURFACE AROUND THE BLADE BOLT BUSHINGS INSTALLED IN THE GRIP TANGS. 5. IF INSTALLED, EXAMINE THE EXPANDABLE BLADE BOLTS FOR CONDITION AND SECURITY. 6. IF INSTALLED, LUBRICATE THE EXPANDABLE BLADE BOLTS. 7. INSTALL MAIN ROTOR BLADES ONTO THE MAIN ROTOR HUB ASSEMBLY. AUTOMATIC FLIGHT CONTROL SYSTEM (AFCS) - 1. VISUALLY EXAMINE THE FOLLOWING FOR CONDITION. 2. DO A FUNCTIONAL CHECK OF THE AFCS. SEALED LEAD ACID (SLA) BATTERY - 1. SERVICE THE BATTERY	MAIN	UNIDAD	EVENTO	POR MONTO	1	
7	1 MONTH INSPECTION PROTECTION - 1. DO A GENERAL VISUAL INSPECTION OF THE FIRE EXTINGUISHER KIT (IF INSTALLED).	FIRE	UNIDAD	EVENTO	POR MONTO	1	
8	3 MONTH INSPECTION CORROSION CONTROL GUIDE 2. SWASHPATE BEARINGS (2 PLACES) 3. PITCH CHANGE LINK BEARING (4 PLACES) 4. TAIL ROTOR PITCH CHANGE MECHANISM (2 PLACES)		UNIDAD	EVENTO	POR MONTO	1	
9	6 MONTH INSPECTION GROUND HANDLING WHEEL (2 PLACES)		UNIDAD	EVENTO	POR MONTO	1	
10	INSPECCION PROGRESIVA - 12 MONTHS ANNUAL INSPECTION GENERAL - 1. MAKE SURE THAT AN AIRFRAME INTERVAL INSPECTION (DMC-407-A-05-00-00-00A-281AA) OR ONE FULL CYCLE (ALL SIX EVENTS) OF THE INSPECTION (DMC-407-A-05-00-00-00A-281A-A) SHOWS COMPLETED IN THE LAST 12 CALENDAR MONTH PERIOD. 2. EXAMINE ALL FUEL SYSTEM, OIL SYSTEM, AND HYDRAULIC SYSTEM FILLER CAPS FOR CORRECT FUNCTION AND SEAL. MAKE SURE THAT THE O-RINGS IN THE FILLER CAPS ARE IN A GOOD CONDITION. REPAIR OR REPLACE THE FILLER CAPS OR REPLACE O-RINGS IF NECESSARY. 3. DO A DYNAMIC BALANCE OF THE MAIN ROTOR HUB AND BLADE ASSEMBLY 4. REMOVE THE INTERIOR TRIM AND ACCESS PANELS NECESSARY TO GET ACCESS. SERVO ACTUATORS - 12 MONTH INSPECTION. FORWARD FUSELAGE - 1. EXAMINE THE CONTROLS FOR THEIR CONDITION, SAFETY AND CORRECT OPERATION. EXAMINE THEM IN THE LOCATIONS. 2. EXAMINE THE COMPONENTS OF THE AIRSPEED-ACTUATED PEDAL STOP FOR THEIR CONDITION, SAFETY AND CORRECT OPERATION. EXAMINE THE COMPONENTS 3. OPERATE THE AIRSPEED-ACTUATED PEDAL STOP MANUAL CABLE RELEASE MECHANISM FOR THE CAM. EXAMINE FOR THE CORRECT OPERATION AND FREE MOVEMENT OF THE CABLE. SAFETY THE CABLE RELEASE HANDLE WITH SHEAR WIRE (C-554) 4. DO A PEDAL RESTRICTOR CONTROL SYSTEM FUNCTIONAL TEST. 5. DO A PEDAL RESTRICTOR CONTROL SYSTEM FUNCTIONAL TEST. 6. EXAMINE ALL FLUID FLEXIBLE AND RIGID LINES FOR THEIR CONDITION, LEAKS, AND SAFETY. EXAMINE THE INTERNAL STRUCTURE OF FORWARD AND SIDE ENGINE MOUNT ATTACH POINTS FOR THEIR CONDITION AND SAFETY. FUEL SYSTEM - 1. DO A FUEL LOW ANNUNCIATOR CIRCUIT OPERATIONAL CHECK. 2. EXAMINE THE OPERATION OF THE CHECK VALVES FOR THE FORWARD FUEL CELL TRANSFER PUMPS. OPERATE EACH TRANSFER/BOOST PUMP ASSEMBLY INDEPENDENTLY AND VISUALLY MAKE SURE OF THE FLOW OF FUEL FROM THE OUTLET OF THE FUEL TRANSFER LINE IN THE AFT FUEL CELL. THE FUEL SYSTEM MUST BE DEFUELED UNTIL THE FUEL LEVEL IS BELOW THE TRANSFER LINE OUTLET. 3. EXAMINE THE FUEL SYSTEM SHUTOFF VALVE AND COMPONENTS FOR THEIR CONDITION, LEAKS, AND SAFETY. MAIN ROTOR MAST - 1. DO AN INSPECTION ON THE INTERNAL DIAMETER OF THE MAST EACH 12 MONTHS. 2. DO AN INSPECTION OF THE LOWER CONE CLAMP JOURNAL OF THE MAST EACH 12 MONTHS. ENGINE - FOR SN: 53000-542991. DO A MGT INDICATOR FUNCTIONAL CHECK IN NORMAL MODE AND START MODE. FOR SN: 54300-SUBSEQUENT2. DO A PSI - MGT OPERATIONAL CHECK (407GX). FOR SN: 54304, 54567, 54805-SUBSEQUENT3. DO THE VISUAL INSPECTION OF THE TRANSIENT VOLTAGE SUPPRESSOR (TVS) (407GX1). FOR SN: 54304, 54567, 54805-SUBSEQUENT4. DO THE FUNCTIONAL CHECK OF THE TRANSIENT VOLTAGE SUPPRESSOR (TVS) (407GX1). GROUND RUN 1. COMPLETE A GROUND RUN AT 100% NR TO EXAMINE FOR LEAKS AND MAKE SURE THAT THE SYSTEM OPERATES. FOR SN: 54300-SUBSEQUENT GARDIN SOFTWARE - 1. MAKE SURE THAT THE LATEST SOFTWARE VERSION CONFIGURATION AVAILABLE ON THE BELL HELICOPTER WEBSITE (WWW.BELLHELICOPTER.NET). 2. UPGRADE THE HELICOPTER TO THE LATEST SOFTWARE VERSION. FIRE PROTECTION DO A DETAILED INSPECTION OF THE FIRE EXTINGUISHER BOTTLE AND BRACKET (IF INSTALLED).		UNIDAD	EVENTO	POR MONTO	1	
11	24 MONTH INSPECTION FUEL SYSTEM 1. REMOVE THE FUEL TRANSFER/FUEL BOOST PUMP ASSEMBLIES. LOOK INTO THE FUEL CELLS. EXAMINE THEM FOR UNWANTED MATERIAL, WATER CONTAMINATION, AND FUNGUS GROWTH. 2. EXAMINE THE FUEL TRANSFER/FUEL BOOST PUMP CHECK VALVES FOR CONDITION. 3. DISASSEMBLE, EXAMINE, AND FUNCTIONALLY TEST THE FUEL TRANSFER/FUEL BOOST PUMP CHECK/THERMAL RELIEF VALVES FOR CONDITION. FOR SN: 53000-542994. DO A CALIBRATION OF THE FUEL QUANTITY SYSTEM. OR SN: 54300-SUBSEQUENT5. DO A CALIBRATION OF THE FUEL QUANTITY SYSTEM. FLIGHT CONTROL BOLTS/NUTS 1. EXAMINE THE BOLTS AND THE NUTS OF THE FLIGHT CONTROLS FOR CONDITION. SERVO ACTUATORS 1. EXAMINE THE BYPASS SPOOL VALVE OF THE SERVO ACTUATORS FOR CORRECT MOVEMENT. GROUND RUN1. COMPLETE A GROUND RUN AT 100% NR TO CHECK FOR LEAKS AND CONFIRM SYSTEM OPERATION.		UNIDAD	EVENTO	POR MONTO	1	
12	MANO DE OBRA POR DIRECTRICES DE AERONAVEGABILIDAD (ADS)		UNIDAD	EVENTO	POR MONTO	1	
13	MANO DE OBRA POR BOLETINES DE SERVICIO (SBS)		UNIDAD	EVENTO	POR MONTO	1	
14	MANO DE OBRA POR MANTENIMIENTO NO PROGRAMADO.		UNIDAD	EVENTO	POR MONTO	1	
15	REPUESTOS E INSUMOS DE LAS DIRECTRICES DE AERONAVEGABILIDAD		UNIDAD	EVENTO	POR MONTO	1	
16	REPUESTOS E INSUMOS POR BOLETINES DE SERVICIO (SBS)		UNIDAD	EVENTO	POR MONTO	1	
TOTAL GRUPO 1							
GRUPO 2 - INSPECCIONES PROGRAMADAS, SECCION DE INSTRUMENTOS Y AVIONICA.							
ITEM	DESCRIPCION DEL BIEN	UNIDAD DE MEDIDA	PRESENTACION	CONTRATO ABIERTO	CANTIDAD	PRECIO UNITARIO	
1	ADC 14CFR PART 43 AP. E	UNIDAD	EVENTO	POR MONTO	1		
2	ALT ENCODER 14CFR PART 43 AP. E	UNIDAD	EVENTO	POR MONTO	1		
3	STATIC SYSTEM LEAK CHECK 14CFR PART 43 AP. E	UNIDAD	EVENTO	POR MONTO	1		
4	XPDR 14CFR PART 43 AP. F (GT335R)	UNIDAD	EVENTO	POR MONTO	1		
5	ELT 14CFR PART 91.207(D)	UNIDAD	EVENTO	POR MONTO	1		
6	ELT BATTERY PACK REPLACEMENT	UNIDAD	EVENTO	POR MONTO	1		
7	MANUALES DE MANTENIMIENTO DE MOTOR (ANUAL)	UNIDAD	EVENTO	POR MONTO	1		
8	MANUALES DE MANTENIMIENTO DE AERONAVE (BIANUAL)	UNIDAD	EVENTO	POR MONTO	1		
9	MANUALES DE MANTENIMIENTO DE AVIONICA (ANUAL)	UNIDAD	EVENTO	POR MONTO	1		
10	SOFTWARE DE MONITOREO DE MANTENIMIENTO (ANUAL)	UNIDAD	EVENTO	POR MONTO	1		
TOTAL GRUPO 2							
GRUPO 3 - INSPECCIONES PROGRAMADAS, SECCION DE ELECTRICA.							
ITEM	DESCRIPCION DEL BIEN	UNIDAD DE MEDIDA	PRESENTACION	CONTRATO ABIERTO	CANTIDAD	PRECIO UNITARIO	
1	FUNCTIONAL CHECK BATTERY (CAPACITY CHECK)	UNIDAD	EVENTO	POR MONTO	1		
2	REEMPLAZO DE BATERIA PRINCIPAL	UNIDAD	EVENTO	POR MONTO	1		
3	MANO DE OBRA POR DIRECTRICES DE AERONAVEGABILIDAD (ADS)	UNIDAD	EVENTO	POR MONTO	1		
4	MANO DE OBRA POR BOLETINES DE SERVICIO (SBS)	UNIDAD	EVENTO	POR MONTO	1		
5	MANO DE OBRA POR MANTENIMIENTO NO PROGRAMADO	UNIDAD	EVENTO	POR MONTO	1		
6	REPUESTOS E INSUMOS DE LAS DIRECTRICES DE AERONAVEGABILIDAD	UNIDAD	EVENTO	POR MONTO	1		
7	REPUESTOS E INSUMOS POR BOLETINES DE SERVICIO (SBS)	UNIDAD	EVENTO	POR MONTO	1		
TOTAL GRUPO 3							



Carbonio

dafiba@fuerzaaerea.mil.py

Nota de solicitud de presupuesto

From: DAF IBA <dafiba@fuerzaaerea.mil.py >

lun., abr. 28, 2025 12:46 PM

Subject: Nota de solicitud de presupuesto

To: anservidio <anservidio@helipower.com.ar >

Adjuntos:

 helipower 3d.pdf

Buenas tardes, remito por este medio la nota de solicitud de presupuesto para el proceso licitatorio para adquisición del servicio de mantenimiento de la aeronave Bell 407

correo.fuerzaaerea.mil.py



Presupuesto Nro
HP - 2024-2460

Fuerza Aerea Paraguaya

Aeronave: Bell 407GXl
Matricula: FAP H-0402
Concepto: Propuesta de mantenimieto
12MTH/150HS

Estimados,
Agradecemos la oportunidad de acuerdo a vuestro requerimiento, enviarle una cotización por las tareas de mantenimiento correspondientes al Helicóptero Bell 407 GXI para vuestro análisis. HELIPOWER S.A., en su carácter de Único Centro de Servicios autorizado de Bell Helicopter en la Republica Argentina, también aprobado por la DINAC (Dirección Nacional de Aviación Civil de Paraguay).

Descripción de lo ofertado: Servicio de mantenimiento programado de acuerdo a lo establecido en el manual del fabricante, que incluya los vencimientos horarios previstos por una utilización de cuatrocientas (150) horas y los vencimientos calendario previstos dentro del plazo de la contratación de 12 meses. Ambos términos a contarse desde comenzado el contrato.

1	INSPECCIONES PROGRAMADAS	Unidad de Medida	PRESENTACIÓN	CONTRATO ABIERTO	CANTIDAD	PRECIO UNITARIO (IVA incluido)	PRECIO TOTAL
1.1	Inspección progresiva - Evento n.º 1 / INSP. 50 HS	UNIDAD	EVENTO	Por monto	1	USD 1.675,00	USD 1.675,00
	1. Examine the placards, decals, and markings. Make sure you can read them, they are applied correctly, and they are in agreement with the applicable configuration of your helicopter.						
	MAIN ROTOR SYSTEM - 1. Examine the main rotor system for condition and security. Examine the components as follows						

	TAIL ROTOR ASSEMBLY - 1. Do a torque check of the tail rotor assembly mast nut (560 to 580 inch-pounds (64 to 65 Nm)).						
	TAIL ROTOR ASSEMBLY - Examine the tail rotor assembly for general condition and security.						
	DIRECTIONAL CONTROLS - 1. Do a torque check of the bolts (60 to 80 inch-pounds (6.7 to 9 Nm)) that attach the tail rotor pitch link assemblies to the tail rotor pitch horns.						
1.2	Inspección progresiva - Evento n.º 2 / INSP. 100 HS	UNIDAD	EVENTO	Por monto	1	USD 570,00	USD 570,00
	1. Examine the placards, decals, and markings. Make sure you can read them, they are applied correctly, and they are in agreement with the applicable configuration of your helicopter.						
	AIRFRAME - 1. Examine the forward and the transmission cowlings for condition. - 2. Examine the upper inlet cowlings for condition. 3. Examine the engine air inlet cowlings for condition. Examine the components as follows						
	CONTROLS - 1. Examine all of the control tubes, bellcranks, and the supports for condition, security, and correct operation.						
	SWASHPLATE ASSEMBLY - 1. Examine the swashplate and support for condition and security.						

	<div>HYDRAULIC - 1. Examine the hydraulic system for condition, leaks and security. Examine the components</div> <div>TRANSMISSION AND PYLON ASSEMBLY - 1. Examine the pylon assembly for condition and security. Examine the components</div>						
1.3	Inspección progresiva - Evento n.º 3 / INSP. 150 HS	UNIDAD	EVENTO	Por monto	1	USD 1.640,00	USD 1.640,00
	<div>1. Examine the placards, decals, and markings. Make sure that you can read them, they are applied correctly, and they are in agreement with the applicable configuration of your helicopter.</div> <div>ENGINE - 1. Examine the engine cowling and the doors for condition and security. 2. Examine the engine for condition, leaks, and security. 3 Examine the firewalls for condition and security. 4. Examine the engine pan drains. Make sure that they are not clogged. Restore broken or missing sealant from engine pan. 5. Examine the engine controls for condition, correct operation, and security. Examine the components as follows:</div> <div>ENGINE TO TRANSMISSION DRIVESHAFT - 1. Examine the engine to transmission driveshaft for condition and security. Examine the components.</div>						

AIRFRAME - 1. Examine the aft fairing for condition. 2. Examine the aft top deck for condition, leaks and security.
OIL SYSTEM - 1. Examine the engine/transmission oil cooling system for condition, leaks, and security.
OIL SYSTEM - 2. Examine the components
AFT SHORT SHAFT ASSEMBLY-1. Examine the short shaft for condition and security.2. Examine the disc pack couplings for condition. 3. Do a torque check of the disc pack coupling attachment hardware (150 to 180 inch-pounds (17 to 20 Nm)).
TAILBOOM STRUCTURE -1. Examine the tail rotor driveshaft cover and the gearbox cowlng for condition and security. 2. Examine the tailboom assembly for condition and security.
TAIL ROTOR DRIVESHAFT 1. Examine the tail rotor driveshaft for condition and security. 2. Examine the driveshaft segment assemblies for any noticeable rotational or axial (fore and aft) play between the adapter and the tail rotor driveshaft, at all four locations.

1.5	300 Hour or 12 Month Inspection	TAIL ROTOR GEARBOX1. Do a torque check of the tail rotor gearbox attachment nuts (140 to 160 inch-pounds (16 to 18 Nm)). 2. Examine the tail rotor gearbox for condition, leaks, and security. 3. Examine the chip detector of the tail rotor gearbox for metal particles. 4. Examine the electrical circuit of the chip detector for continuity. 5. Examine tail rotor gearbox output shaft at crosshead seal sliding area for wear and corrosion.☐							
		PITCH CHANGE CONTROL1. Examine the tail rotor pitch control mechanism for condition and security. Examine the components							
		ELECTRICAL 1. Examine all visible electrical components, wires, cables, and connectors in the area of the tailboom for chafing, and general condition and security. 2. Verify navigation lights and anti-collision light for operation, condition, and security.3. Examine antennas for condition and security.							
		ELECTRICAL							
		GROUND RUN 1. Complete a ground run at 100% NR to check for leaks and confirm system operation							
		UNIDAD	EVENTO	Por monto	1	USD	1.300,00	USD	1.300,00

	FUEL SYSTEM - 1. Examine the auxiliary fuel tank installation for condition and security.						
1.6	600 Hour or 12 Month Inspection	UNIDAD	EVENTO	Por monto	1	USD 1.000,00	USD 1.000,00
1.7	<p>MAIN ROTOR HUB AND BLADE - 1. Remove main rotor blades from the main rotor hub assembly.2. Remove oil and grease from the main rotor hub, blades, and blade bolts with Clean cloth (C-516) dampened with Aliphatic naphtha (C-305) or Drycleaning solvent (C-304). 3. Clean main rotor hub and blades with Cleaning compound (C-318). Thoroughly rinse with fresh water and dry with clean cloths.4. Examine main rotor hub and blades for evidence of corrosion. Pay particular attention to the surface around the blade bolt bushings installed in the grip tangs.5. If installed, examine the expandable blade bolts for condition and security.6. If installed, lubricate the expandable blade bolts.7. Install main rotor blades onto the main rotor hub assembly.</p>						
	AUTOMATIC FLIGHT CONTROL SYSTEM (AFCS) - 1. Visually examine the following for condition 2. Do a functional check of the AFCS.						
	SEALED LEAD ACID (SLA) BATTERY - 1. Service the battery						
1.7	1 Month Inspection	UNIDAD	EVENTO	Por monto	1	USD 1.690,00	USD 1.690,00

	FIRE PROTECTION -1. Do a general visual inspection of the fire extinguisher kit (If installed).						
1.8	3 Month Inspection	UNIDAD	EVENTO	Por monto	1	USD 1.690,00	USD 1.690,00
	1. CORROSION CONTROL GUIDE 2. SWASHPLATE BEARINGS (2 PLACES) 3. PITCH CHANGE LINK BEARING (4 PLACES) 4. TAIL ROTOR PITCH CHANGE MECHANISM (2 PLACES)						
1.9	6 Month Inspection	UNIDAD	EVENTO	Por monto	1	USD 1.310,00	USD 1.310,00
	GROUND HANDLING WHEEL (2 PLACES)						
1.10	12 Month Inspection	UNIDAD	EVENTO	Por monto	1	USD 5.900,00	USD 5.900,00
	<p>GENERAL - 1. Make sure that an airframe interval inspection (DMC-407-A-05-00-00-00A-281A-A) or one full cycle (all six events) of the inspection (DMC-407-A-05-00-00-00A-281A-A) shows completed in the last 12 calendar month period. 2. Examine all fuel system, oil system, and hydraulic system filler caps for correct function and seal. Make sure that the O-rings in the filler caps are in a good condition. Repair or replace the filler caps or replace O-rings if necessary 3. Do a dynamic balance of the main rotor hub and blade assembly. 4. Remove the interior trim and access panels necessary to get access.</p> <p>SERVO ACTUATORS - For : Servo actuator P/N 206-076-062-105/-1071. Do the Servo Actuators - 12 Month Inspection.</p>						

FORWARD FUSELAGE - 1. Examine the controls for their condition, safety and correct operation. Examine them in the locations. 2. Examine the components of the airspeed-actuated pedal stop for their condition, safety and correct operation. Examine the components 3. Operate the airspeed-actuated pedal stop manual cable release mechanism for the cam. Examine for the correct operation and free movement of the cable. Safety the cable release handle with Shear wire (C-554). 4. Do a pedal restrictor control system functional test. 5. Do a pedal restrictor control system functional test. 6. Examine all fluid flexible and rigid lines for their condition, leaks, and safety. . Examine the internal structure of forward and side engine mount attach points for their condition and safety.

FUEL SYSTEM - 1. Do a fuel low annunciator circuit operational check. 2. Examine the operation of the check valves for the forward fuel cell transfer pumps. Operate each transfer/boost pump assembly independently and visually make sure of the flow of fuel from the outlet of the fuel transfer line in the aft fuel cell. The fuel system must be defueled until the fuel level is below the transfer line outlet. 3. Examine the fuel system shutoff valve and components for their condition, leaks, and safety.

TAILBOOM - 1. Examine the steps that follow for their condition and safety

MAIN ROTOR MAST - 1. Do an inspection on the internal diameter of the mast each 12 months. 2. Do an inspection of the lower cone clamp journal of the mast each 12 months.

ENGINE - For SN: 53000-542991. Do a MGT Indicator functional check in Normal Mode and Start Mode. For SN: 54300-Subsequent 2. Do a PSI - MGT operational check (407GX). For SN: 54304, 54567, 54805-Subsequent 3. Do the visual inspection of the Transient Voltage Suppressor (TVS) (407GX). For SN: 54304, 54567, 54805-Subsequent 4. Do the functional check of the Transient Voltage Suppressor (TVS) (407GX).

	GROUND RUN 1. Complete a ground run at 100% NR to examine for leaks and make sure that the system operates.						
	For SN: 54300-SubsequentGARMIN SOFTWARE -1. Make sure that the latest software version configuration available on the Bell Textron website (www.bellhelicopter.net). 2. Upgrade the helicopter to the latest software version.						
	FIRE PROTECTION Do a detailed inspection of the fire extinguisher bottle and bracket (if installed).						
1.11	24 Month Inspection	UNIDAD	EVENTO	Por monto	1	USD 4.050,00	USD 4.050,00
	FUEL SYSTEM 1. Remove the fuel transfer/fuel boost pump assemblies. Look into the fuel cells. Examine them for unwanted material, water contamination, and fungus growth. 2. Examine the fuel transfer/fuel boost pump check valves for condition. 3. Disassemble, examine, and functionally test the fuel transfer/fuel boost pump check/thermal relief valves for condition.For SN: 53000-542994. Do a calibration of the fuel quantity system. or SN: 54300-Subsequent5. Do a calibration of the fuel quantity system.						
	FLIGHT CONTROL BOLTS/NUTS 1. Examine the bolts and the nuts of the flight controls for condition.						

	SERVO ACTUATORS 1. Examine the bypass spool valve of the servo actuators for correct movement.☑						
	GROUND RUN1. Complete a ground run at 100% NR to check for leaks and confirm system operation.						
2	MANO DE OBRA POR DIRECTRICES DE AERONAVEGABILIDAD (ADS)	UNIDAD	EVENTO	Por monto	1	USD 1.550,00	USD 1.550,00
3	MANO DE OBRA POR BOLETINES DE SERVICIO (SBS)	UNIDAD	EVENTO	Por monto	1	USD 1.480,00	USD 1.480,00
4	MANO DE OBRA POR MANTENIMIENTO NO PROGRAMADO.	UNIDAD	EVENTO	Por monto	1	USD 5.550,00	USD 5.550,00
5	REPUESTOS E INSUMOS DE LAS DIRECTRICES DE AERONAVEGABILIDAD	UNIDAD	EVENTO	Por monto	1	USD 1.250,00	USD 1.250,00
6	REPUESTOS E INSUMOS POR BOLETINES DE SERVICIO (SBS)	UNIDAD	EVENTO	Por monto	1	USD 1.550,00	USD 1.550,00
TOTAL						USD 33.130,00	

2							
	INSPECCIONES PROGRAMADAS , SECCION DE INSTRUMENTOS Y AVIONICA.	Unidad de Medida	PRESENTACIÓN	CONTRATO ABIERTO	CANTIDAD	PRECIO UNITARIO (IVA incluido)	PRECIO TOTAL
2.1	ADC 14CFR PART 43 AP. E	UNIDAD	EVENTO	Por monto	1	USD 195,00	USD 195,00
2.2	ALT ENCODER 14CFR PART 43 AP. E	UNIDAD	EVENTO	Por monto	1	USD 175,00	USD 175,00
2.3	STATIC SYSTEM LEAK CHECK 14CFR PART 43 AP. E	UNIDAD	EVENTO	Por monto	1	USD 180,00	USD 180,00
2.4	XPDR 14CFR PART 43 AP. F (GTX335R)	UNIDAD	EVENTO	Por monto	1	USD 110,00	USD 110,00
2.5	ELT 14CFR PART 91.207(D)	UNIDAD	EVENTO	Por monto	1	USD 85,00	USD 85,00
2.6	ELT BATTERY PACK REPLACEMENT	UNIDAD	EVENTO	Por monto	1	USD 1.500,00	USD 1.500,00
2.7	MANUALES DE MANTENIMIENTO DE MOTOR (ANUAL)	UNIDAD	EVENTO	Por monto	1	USD 2.465,00	USD 2.465,00

2.8	MANUALES DE MANTENIMIENTO DE AERONAVE (BIANUAL)	UNIDAD	EVENTO	Por monto	1	USD 2.200,00	USD 2.200,00
2.9	MANUALES DE MANTENIMIENTO DE AVIONICA (ANUAL)	UNIDAD	EVENTO	Por monto	1	USD 2.400,00	USD 2.400,00
2.10	SOFTWARE DE MONITOREO DE MANTENIMIENTO (ANUAL)	UNIDAD	EVENTO	Por monto	1	USD 8.800,00	USD 8.800,00
TOTAL						USD 18.110,00	

3							
	INSPECCIONES PROGRAMADAS, SECCION DE ELECTRICA.	Unidad de Medida	PRESENTACIÓN N	CONTRATO ABIERTO	CANTIDAD	PRECIO UNITARIO (IVA incluido)	PRECIO TOTAL
3.1	FUNCTIONAL CHECK BATTERY (CAPACITY CHECK)	UNIDAD	EVENTO	Por monto	1	USD 200,00	USD 200,00
3.2	REEMPALZO DE BATERIA PRINCIPAL	UNIDAD	EVENTO	Por monto	1	USD 6.300,00	USD 6.300,00
3.3	MANO DE OBRA POR DIRECTRICES DE AERONAVEGABILIDAD (ADS)	UNIDAD	EVENTO	Por monto	1	USD 500,00	USD 500,00
3.4	MANO DE OBRA POR BOLETINES DE SERVICIO (SBS)	UNIDAD	EVENTO	Por monto	1	USD 500,00	USD 500,00
3.5	MANO DE OBRA POR MANTENIMIENTO NO PROGRAMADO.	UNIDAD	EVENTO	Por monto	1	USD 2.500,00	USD 2.500,00
3.6	REPUESTOS E INSUMOS DE LAS DIRECTRICES DE AERONAVEGABILIDAD	UNIDAD	EVENTO	Por monto	1	USD 500,00	USD 500,00
3.7	REPUESTOS E INSUMOS POR BOLETINES DE SERVICIO (SBS)	UNIDAD	EVENTO	Por monto	1	USD 500,00	USD 500,00
TOTAL						USD 11.000,00	

4							
	REPUESTOS PARA INSPECCIONES PROGRAMADAS DE LAS DIFERENTES SECCIONES	P/N	PRESENTACIÓN N	CONTRATO ABIERTO	CANTIDAD	PRECIO UNITARIO (IVA incluido)	PRECIO TOTAL
4.1	TORQUE SEAL	F900	EVENTO	Por monto	1	USD 18,15	USD 18,15
4.2	ACEITE	AEROSHELL 555	EVENTO	Por monto	12	USD 37,81	USD 453,72

4.3	ACEITE	AEROSHELL 560	EVENTO	Por monto	12	USD	30,25	USD	363,00
4.4	HIDRAULIC FLUID	F41	EVENTO	Por monto	4	USD	19,66	USD	78,64
4.5	COTTER PIN	MS24665- 155	EVENTO	Por monto	40	USD	0,23	USD	9,20
4.6	COTTER PIN	MS24665- 357	EVENTO	Por monto	8	USD	0,15	USD	1,20
4.7	PACKING	AS3209-011	EVENTO	Por monto	6	USD	1,21	USD	7,26
4.8	PACKING	AS3209-113	EVENTO	Por monto	1	USD	19,66	USD	19,66
4.9	PACKING	AS3208-06	EVENTO	Por monto	1	USD	7,56	USD	7,56
4.10	PACKING	AS3209-236	EVENTO	Por monto	1	USD	8,02	USD	8,02
4.11	PACKING	AS3209-024	EVENTO	Por monto	2	USD	4,01	USD	8,02
4.12	ELEMENT	204-040-760- 109	EVENTO	Por monto	1	USD	614,08	USD	614,08
4.13	PACKING	AS3209-016	EVENTO	Por monto	1	USD	19,66	USD	19,66
4.14	RETAINER	MS28774- 211	EVENTO	Por monto	2	USD	1,13	USD	2,26
4.15	PACKING	MS28775- 211	EVENTO	Por monto	2	USD	3,33	USD	6,66
4.16	PACKING	MS28775- 011	EVENTO	Por monto	2	USD	2,04	USD	4,08
4.17	GRASA	MOBIL 28	EVENTO	Por monto	1	USD	28,74	USD	28,74
4.18	PACKING	MS28778-4	EVENTO	Por monto	1	USD	1,51	USD	1,51
4.19	PACKING	MS29513- 270	EVENTO	Por monto	2	USD	14,44	USD	28,88
4.20	SELLANTE	PRC890B2	EVENTO	Por monto	1	USD	423,50	USD	423,50
4.21	PACKING	MS29512-10	EVENTO	Por monto	4	USD	0,83	USD	3,32
4.22	PACKING	MS29513- 110	EVENTO	Por monto	4	USD	3,10	USD	12,40
4.23	PACKING	MS29513- 115	EVENTO	Por monto	4	USD	3,25	USD	13,00
4.24	PACKING	AS3209-012	EVENTO	Por monto	14	USD	3,55	USD	49,70
4.25	PACKING	AS3209-014	EVENTO	Por monto	1	USD	3,78	USD	3,78

4.26	PACKING	AS3209-016	EVENTO	Por monto	1	USD 19,66	USD 19,66
4.27	PACKING	AS3209-126	EVENTO	Por monto	1	USD 5,90	USD 5,90
4.28	PACKING	AS3209-113	EVENTO	Por monto	1	USD 19,66	USD 19,66
4.29	PACKING	AS3208-03	EVENTO	Por monto	1	USD 2,12	USD 2,12
4.30	ELEMENT LUBE FILTER	M250-10386	EVENTO	Por monto	1	USD 2.232,45	USD 2.232,45
4.31	LUBE AFS SILTER OIL	OILMAGNIFI C	EVENTO	Por monto	1	USD 75,63	USD 75,63
4.32	THIXOGREASE	THIXOGREAS E	EVENTO	Por monto	1	USD 57,48	USD 57,48
4.33	FILTER ELEMENT FUEL	M250-10626	EVENTO	Por monto	1	USD 2.631,75	USD 2.631,75
TOTAL REPUESTOS Y CONSUMIBLES							USD 7.230,65
TOTAL GENERAL DE MANTENIMIENTO							USD 69.470,65

5	COMPONENTE DE VIDA LIMITE - MOTOR M250-C47B 2000 HRS / 3000 CICLOS	Unidad de Medida	PRESENTACIÓ N	CONTRATO ABIERTO	CANTIDAD	PRECIO UNITARIO (IVA Incluido)	PRECIO TOTAL
5.1	MANO DE OBRA POR INSPECCION DE 2000 H	UNIDAD	EVENTO	Por monto	1	USD 22.000,00	USD 22.000,00
5.2	REPUESTOS E INSUMOS POR INSPECCIÓN 2000 HS MOTOR / 3000 CICLOS	UNIDAD	EVENTO	Por monto	1	USD 85.000,00	USD 85.000,00
TOTAL GENERAL DE INSPECCIÓN MOTOR							USD 107.000,00

* PRESUPUESTO REALIZADO DE ACUERDO AL PLAN DE MANTENIMIENTO PERIODICO SUGERIDO POR EL FABRICANTE. (NO PLAN DE MANTENIMIENTO PROGRSIVO)

NOTAS:

1- Quedan excluidos los trabajos de recorrido de componentes, ya sea por solo requerimiento del propleitario o por otro hecho fortuito y las novedades surgidas de las inspecciones realizadas, ya sea su mano de obra y/o repuestso, las cuales serán presupuestadas por separado.

2- El valor es fijo y único al comienzo de la ejecución del contrato

TOTAL GENERAL INSPECCIONES (USD)	USD	69.470,65
<i>Prestación de servicios y total de consumibles/repuestos necesarios para el cumplimiento servicio de mantenimiento programado.</i>		
<i>Son Dolares Estadounidenses Sesenta y Nueve Mil Cuatrocientos Setenta con 65/100</i>		

TOTAL GENERAL INSPECCIONES PROGRAMADAS + COMPONEI USD	USD	176.470,65
<i>Prestación de servicios y total de consumibles/repuestos necesarios para el cumplimiento servicio de mantenimiento programado y vencimientos.</i>		
<i>Son Dolares Estadounidenses Ciento Sesenta y Seis Mil Cuatrocientos Setenta con 65/100</i>		


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