



#### Smlouva o dílo

uzavřená v souladu s ustanoveními § 2586 a násl. zák. č. 89/2012 Sb., občanský zákoník, v platném znění (dále jen "**Smlouva**")

#### **Contract for Work**

concluded in accordance with Section 2586 *et seq* of Act No. 89/2012 Coll., Civil Code ("CC"), as amended (hereinafter the "**Contract**")

#### I. SMLUVNÍ STRANY:

#### 1. Objednatel:

#### České vysoké učení technické v Praze

se sídlem: Zikova 1903/4 PSČ 166 36 Praha 6

zastoupené: na základě zmocnění prof. Ing. Petra Konvalinky, CSc., rektora, jednajícím prof. Ing. Michaelem Valáškem, DrSc., děkanem Fakulty strojní Adresa: Technická 4, 166 07 Praha 6

Bankovní spojení:

číslo účtu:

IČO: 68407700 DIČ: CZ68407700 (dále jen "**Objednatel**")

а

#### 2. Zhotovitel:

#### Beechcraft Berlin Aviation GmbH,

se sídlem Flughafen BER, ZKS 10 Ost, Geb. X064, Elly-Beinhorn 4, 12529 Schönefeld, Spolková republika Německo

IČ: HRB 10354

zapsaná v rejstříku vedeném Okresním soudem v Chotěbuzi pod HRB 10354 CB zastoupen Rolfem Kaeselauem - jednatelem

Bankovní spojení:

Číslo účtu: EURO-konto:

IBAN-No.: Swift/Bic-Code: IČ: HRB 10354 DIČ: DE811157673

#### 1. Client:

#### České vysoké učení technické v Praze

With its seat at: Zikova 1903/4

**CONTRACTUAL PARTIES:** 

166 36 Praha 6

represented by: Ing. Michael Valášek DrSc., Dean of the Faculty of Mechanical Engineering, acting on behalf of prof. Ing.

Petr Konvalinka, CSc., Rector

With his seat at: Technická 4, 166 07

Praha 6

Banking details:

Account No.:

ID No.: 68407700 VAT No.: CZ68407700 (hereinafter the "Client")

and

#### 2. Contractor:

#### Beechcraft Berlin Aviation GmbH,

With its seat at Flughafen BER, ZKS 10 Ost, Geb. X064, Elly-Beinhorn 4, 12529

Schönefeld, Germany ID No.: HRB 10354

Registered with the District Court in

Cottbus under HRB 10354 CB

Represented by Rolf Kaeselau – Managing

Director

Banking details:

Account No EURO-konto:

IBAN-No.: Swift/Bic-Code:

ID No.: HRB 10354 VAT No.: DE811157673





(dále jen "Zhotovitel"; (Objednatel a Zhotovitel dále společně jen "Smluvní strany" nebo každý z nich samostatně jen "Smluvní strana").

(hereinafter the "Contractor"; the Client and the Contractor may be referred to jointly as the "Parties" or with respect to each individually as the "Party").

#### II. ZÁKLADNÍ USTANOVENÍ:

#### Objednatel je příjemcem dotace Ministerstva školství, mládeže a tělovýchovy České republiky (dále jen "Řídicí orgán") na projekt "Výzkumná infrastruktura pro letectví a kosmické technologie", reg. č. CZ.02.1.01/0.0/0.0/16\_017/0002620, v rámci Operačního programu Výzkum, vývoj a vzdělávání (dále jen "OP VVV"; dále jen "Projekt").

- 2. Cílem Projektu je zajistit výzkumnou infrastrukturu pro letectví a kosmické technologie pro Projekt OP VVV, v jehož rámci bude probíhat výzkum vývoje vlastností leteckých motorů a leteckých konstrukcí během jejich užívání, a dále zajištění výzkumu a výuky studentů doktorského programu s názvem Letectví a vesmírné technologie.
- 3. Za účelem úspěšné realizace Projektu je nezbytné zajistit provedení díla dle této Smlouvy. Dílo bude užíváno pro řešení výzkumných úkolů v rámci grantových projektů, kolaborativních výzkumných projektů (výzkumných projektů v účinné spolupráci), smluvních výzkumných projektů, disertačních prací doktorandů a dalších výzkumných projektů.
- Zhotovitel se stal vítězem zadávacího řízení vyhlášeného Objednatelem dle zákona č. 134/2016 Sb., o zadávání veřejných zakázek, v platném znění (dále jen "ZZVZ"), na zakázku s názvem "Flying Test Bed – Round 2" (dále jen "Zadávací řízení").

#### II. FUNDAMENTAL PROVISIONS:

- 1. The Client is the recipient of funding provided by the Ministry of Education, Youth and Sports of the Czech Republic for the Project "Research infrastructure for aviation and space Technology", Reg. No. CZ.02.1.01/0.0/0.0/16\_017/0002620,gran ted under the Operational Programme Research, Development and Education (hereinafter "OP RDE" and "Project").
- 2. The objective is to acquire aircraft and space technology research infrastructure for the OP RDE Project, which will be used for research into the development of aircraft engines' and aircraft constructions' properties during their lifetime and for facilitating research and tuition of post-graduate students within the doctoral programme in Aircraft and Space Technologies.
- 3. In order to successfully implement the Project, it will be necessary to execute a certain work according to this Contract. The executed work shall be used to carry out research within the framework of grant programmes, collaborative research projects, contract research, dissertations of post-graduate students and other research projects.
- 4. The Contractor won the public procurement procedure announced by the Client pursuant to Act No. 134/2016 Coll., on Public Procurement, as amended (hereinafter the "Public Procurement Act" or "PPA"), for tender entitled "Flying Test Bed Round 2" (hereinafter the "Tender").





- 5. Podkladem pro provedení díla je
  - a) technická specifikace provedení díla, která tvoří nedílnou součást této Smlouvy jako Příloha č. 1 (dále jen "Technická specifikace"). Tato Technická specifikace provedení díla byla rovněž součástí zadávací dokumentace k Zadávacímu řízení jako její příloha č. 4;
  - b) nabídka Zhotovitele podaná v rámci Zadávacího řízení v rozsahu té části, která dílo technicky popisuje (dále jen "Nabídka"); Nabídka tvoří Přílohu č. 2 Smlouvy a je její nedílnou součástí;
  - zadávací dokumentace k Zadávacímu řízení, která tvoří nedílnou součást této Smlouvy jako Příloha č. 3 (dále jen "Zadávací dokumentace").
- 6. Zhotovitel prohlašuje, že je ve smyslu § 5 odst. 1 zák. č. 89/2012 Sb., občanský zákoník, v platném znění (dále jen "OZ")schopen při plnění této Smlouvy jednat se znalostí a pečlivostí, která je s jeho povoláním nebo stavem spojena, s tím, že případné jeho jednání bez této odborné péče půjde k jeho tíži. Zhotovitel nesmí svou kvalitu odborníka ani své hospodářské postavení zneužít k vytváření nebo využití závislosti slabší strany a k dosažení zřejmé a nedůvodné rovnováhy ve vzájemných právech a povinnostech. Zhotovitel dále prohlašuje, že na jeho straně neexistují žádné překážky, které by mu bránily dílo dle Smlouvy provést.
- 7. Zhotovitel prohlašuje, disponuje že veškerými odbornými předpoklady potřebnými pro provedení díla dle Smlouvy, to včetně dostatečných znalostí příruček vztahujících k jeho k poskytování dotací, je а

- 5. The documentation for the execution of work includes
  - a) technical specifications relating to the performance to be provided, which forms an integral part hereof as Annex 1 (hereinafter the "Technical specification"). This Technical specification also formed a part of the tender documentation in the Tender as its Annex 4;
  - b) part of the Contractor's bid as submitted in the Tender, which describes the work in technical detail (hereinafter the "Bid"); the Bid forms Annex 2 to this Contract and an integral part hereof.
  - the tender documentation used in the Tender is annexed hereto as Annex 3 (hereinafter the "Documentation").
- 6. The Contractor declares that while fulfilling this Contract he shall be capable, within the meaning of Section 5 (1) of Act No. 89/2012 Coll., Civil Code, as amended (hereinafter as "CC"), to act with knowledge and care which is required of his profession or professional status, and that he shall be fully liable for any actions lacking this required professional care. The Contractor shall not misuse his professional qualities or his economic position to create or exploit dependence of a weaker party hereto or to achieve an obvious and unjustified imbalance in mutual rights and duties. The Contractor further declares that that there are no obstacles on his part that would prevent him from executing the work contracted hereunder.
- 7. The Contractor declares that he possesses all professional qualifications that are required to execute the work hereunder, including sufficient knowledge of guidelines relating to subsidy grants, and that he is fully authorized to provide





provedení díla oprávněn.

- 8. Zhotovitel bere na vědomí, že Objednatel není ve vztahu k předmětu této Smlouvy podnikatelem.
- 9. Zhotovitel prohlašuje, že přejímá na sebe nebezpečí změny okolností ve smyslu ustanovení § 1765 odst. 2 OZ.
- 10. Zhotovitel bere na vědomí, že termíny pro plnění díla nebo jeho části dle Smlouvy uvedené v čl. VII. jsou pro Objednatele zásadní vzhledem k provázanosti Projektu a termínu, do kterého má být tento Projekt realizován, a že v případě jejich nesplnění může Objednateli vzniknout škoda. Objednatel Zhotovitele seznámil s návazností termínů stanovených touto Smlouvou na termíny Projektu.

#### III. PŘEDMĚT A ROZSAH DÍLA:

- 1. Předmětem této Smlouvy je:
  - a) výběr a dodání experimentálního letadla schopného dosáhnout cílů testů turbovrtulového motoru s nezbytnými úpravami letadla;
  - vytvoření projektu modifikace experimentálního letadla spojeného s testováním turbovrtulového motoru, včetně odpovídajících přístrojových požadavků;
  - c) provedení fyzické modifikace platformy létajícího testovacího prostředí tak, aby došlo k nahrazení původního motoru experimentálního letadla odlišným modelem, vybaveným turbovrtulovým motorem;
  - d) vyprojektování, dodání a instalace systému pro sběr dat

performance hereunder.

- The Contractor is aware that the Client does not act as an entrepreneur in relation to the subject-matter of this Contract.
- 9. The Contractor declares that he assumes the risk of change in circumstances within the meaning of Section 1765 (2) CC.
- 10. The Contractor acknowledges that the deadlines for execution of the work or its parts as defined herein in Article VII are vital for the Client with regard to the Project tie-in activities and the date by which this project has to be implemented, and that in the event of a failure to meet these deadlines, damage may arise to the Client. The Client has notified the Contractor what are the tie-in deadlines specified hereunder in connection with the Project deadlines.

#### **III.SUBJECT AND EXTENT OF WORK:**

- 1. The subject-matter hereof is:
  - a) Selection and Procurement of an aircraft capable of achieving test objectives of a test turboprop engine, with necessary aircraft modifications;
  - b) Design of a modification of an aircraft to interface with a test turboprop engine, including accommodating instrumentation requirements;
  - Execution of physical modification of a flying test bed platform to replace one existing engine with a different model, instrumented turboprop engine;
  - d) Design, procurement, and installation of a data acquisition system





- e) získání EASA povolení k letu pro modifikované experimentální letadlo s experimentálním motorem v České republice. Modifikované experimentální letadlo musí být registrováno v České republice;
- f) integrace Objednatelem dodaného experimentálního motoru a zapojení
- g) provedení testovacích letových operací v rozsahu do 180 testovacích letových hodin v České republice, a to od 1. září 2018 do 30. června 2019;

přístrojových kabelů;

- h) údržba modifikovaného experimentálního letadla, letadlové avioniky, stávající vrtule a původního motoru až do 30. června 2019, a to v nezbytném rozsahu definovaném odpovídajícími příručkami.
- 2. Součástí díla je také poskytnutí 2 (slovy: dvou) testovacích inženýrů, kteří se budou účastnit testovacího letu v případě, že tak Objednatel stanoví (dále jen "Testovací inženýr") a v maximálním rozsahu odpovídajícím počtu testovacích leteckých hodin v případě každého Testovacího inženýra (tj. maximálně 360 hodin). Úlohou Testovacího inženýra bude zajistit, že testovací let probíhá v souladu s touto Smlouvou, zejména Technickou specifikací.
- 3. Definici předmětu díla upřesňují přílohy této Smlouvy, zejména Technická specifikace a Nabídka (všechny dodávky, práce a služby dle této Smlouvy a jejích příloh společně také jako "Dílo"). Pokud však ke splnění požadavků Objednatele specifikovaných ve Smlouvě, a k řádnému zhotovení Díla budou potřebné i další dodávky a práce v této Smlouvě výslovně neuvedené, je Zhotovitel povinen tyto dodávky a práce na své náklady obstarat či provést a do svého plnění zahrnout bez dopadu na cenu díla sjednanou v čl. X. této Smlouvy.

- e) Obtain EASA permit to fly for the modified aircraft with the test engine in Czech Republic. The aircraft shall be registered in the Czech Republic;
- f) Installation of the customer supplied instrumented test engine, and connection of instrumentation leads;
- g) Flight test operations of up to 180flight test hours in the Czech Republic between Sept 1, 2018 and June 30, 2019;
- h) Line level maintenance as necessary and as defined by the corresponding manuals for aircraft, aircraft avionics, legacy propeller and legacy engine till June 30, 2019.
- 2. The subject-matter hereof is also providing of 2 (two) test engineers (hereinafter the "Test Engineer") who shall accompany each flight to ensure the flights are achieving the desire test points if requested by the Client. The maximal number of test hours of the participation of the test engineers corresponds to the number of flight test operations (max. 360 hours).
- 3. Definition of the subject-matter of the work is provided in detail within the Annexes to this Contract, particularly Technical Specification and the Bid (all supplies, work and services pursuant to this Contract and its Annexes shall be referred to as the "Work"). Should it be necessary, in order to meet the Client's requirements as specified in the Contract and / or to duly complete the Work hereunder, to provide additional supplies or perform other work which had not been expressly defined in this Contract, the Contractor shall be obliged to provide





- 4. Zhotovitel se zavazuje za podmínek stanovených touto Smlouvou řádně a včas na svůj náklad a na svoji odpovědnost zhotovit a předat Objednateli Dílo specifikované v Technické specifikaci a to za splnění podmínek dále vymezených touto Smlouvou. Dílo bude provedeno v rozsahu, způsobem a v jakosti stanovené touto zejména všemi výchozími Smlouvou, dokumenty, včetně případných změn dodatků a doplňků sjednaných Smluvními stranami nebo vyplývajících z rozhodnutí příslušných orgánů.
- Objednatel se zavazuje řádně a včas provedené Dílo převzít. Objednatel je povinen zaplatit Zhotoviteli cenu za Dílo ve výši, za podmínek a způsobem uvedeným v této Smlouvě.
- 6. Zhotovitel bere na vědomí, že na Dílo navazující služby, spočívající v pravidelné údržbě modifikovaného experimentálního letadla a v předem vymezeném počtu testovacích leteckých hodin v období následujícím po 30. 06. 2019 budou v případě potřeby na straně Objednatel řešeny postupem dle ust. § 100 odst. 3 ZZVZ formou vyhrazených změn.
- 7. Není-li v této Smlouvě uvedeno jinak, není Zhotovitel oprávněn ani povinen provést jakoukoliv změnu Díla bez písemné dohody s Objednatelem, a to ve formě písemného dodatku k této Smlouvě. Převzetí Díla, resp. jeho části, Objednatelem nepředstavuje písemnou dohodu o změnách Díla dle věty první.

- such supplies or work and include such in his performance at his own cost with impact to the price agree herein.
- 4. The Contractor undertakes, at his own cost and risk, to duly complete the Work specified in the Technical Specification and to hand it over to the Client in timely manner in full compliance with the terms and conditions defined herein. The Work shall be executed in the extent, manner and quality as defined herein and any accompanying documentation, including amendments hereto any supplementing documentations that may be agreed between the Parties or arising from decisions issued by competent authorities.
- 5. The Client undertakes to take delivery of the timely and duly completed Work. The Client shall be obliged to pay to the Contractor the price for the Work in line with terms and conditions and manner agreed herein.
- 6. The Contractor acknowledges that the follow-on services associated with the Work, which consist of regular maintenance of the modified experimental aircraft (Aircraft) and pre-defined number of flight test hours, to be provided after 30 June 2019 shall be subject, if the Client will require these, to procedure defined in Section 100 para 3 PPA in the form of 'reserved changes'.
- 7. Unless agreed otherwise herein, the Contractor shall not be authorized nor obliged to execute any changes to the Work without prior written agreement with the Client that shall be executed in the form of a written Amendment hereto. Handover of the Work or its part and its acceptance by the Client, shall not be understood to represent a written agreement on changes according to the first sentence of this paragraph.





#### IV. VĚCI URČENÉ KE ZHOTOVENÍ DÍLA:

- 1. K opatření věcí potřebných k provedení Díla, není-li ve Smlouvě stanoveno jinak, je zavázán Zhotovitel.
- Objednatel poskytne Zhotoviteli testovací motor odpovídající technickému popisu uvedenému v Technické specifikaci (dále jen "motor"). Tento motor bude Objednatelem předán Zhotoviteli bezplatně pouze za účelem jeho integrace do experimentálního letadla dle této Smlouvy (dále jen "modifikace").
- 3. Motor zůstává po celou dobu ve vlastnictví Objednatele. Smluvní strany vylučují, že by modifikací experimentálního letadla docházelo ke smísení motoru s modifikovaným experimentálním letadlem ve smyslu § 1078 odst. 1 OZ.
- 4. Objednatel se zavazuje poskytnout Zhotoviteli součinnost při tvorbě technických návrhů v rámci definovaných design review.
- Motor bude doručen na místo určené Zhotovitelem. Zhotovitel je povinen Objednateli sdělit místo předání motoru, nejpozději do 30. 05. 2018.
- 6. Zhotovitel se zavazuje zachovávat motor předaný Objednatelem ve funkčním stavu, uchovávat jej v souladu s OEM požadavky, provádět běžnou údržbu a drobné opravy, přičemž náklady na jejich provedení jsou zohledněny již v ceně za Dílo uvedené v čl X. této Smlouvy. Za stejných podmínek je Zhotovitel povinen uchovávat původní motor experimentálního letadla, který bude z letadla vyjmut v rámci modifikace.

# IV. EQUIPMENT REQUIRED TO EXECUTE THE WORK:

- The Contractor shall secure such equipment as may be required to execute the Work defined hereunder, unless the Contract stipulates otherwise.
- 2. The Client shall provide to the Contractor a test engine described in the Technical Specification (hereinafter the "Engine"). This Engine shall be provided to the Contractor free of charge for the sole purpose of it being integrated into the Aircraft in accordance with this Contract (hereinafter the "Modification").
- 3. The Engine shall remain in the Client's ownership throughout. The Parties expressly exclude that Aircraft Modification would result in a merger of the Engine with the Aircraft in the sense of provisions of Section 1078 para 1 CC.
- The Client undertakes to provide to the Contractor necessary cooperation in creation of the technical designs in frame of defined design review.
- The Engine shall be delivered to site defined by the Contractor. The Contractor shall be obliged to inform the Client of the place of delivery no later than by 30 May 2018.
- 6. The Contractor undertakes to maintain the Engine provided by the Client in functional condition, in compliance with OEM requirements and to perform regular maintenance and minor repairs thereon; the cost of such performance has already been reflect in the total price for the Work. The Contractor shall maintain, under the same terms, the original engine from the Aircraft, which shall be removed from the aircraft prior to Modification.





- 7. Po dobu umístění motoru u Zhotovitele, odpovídá Zhotovitel za škody způsobené jeho nevhodným užitím a za škody způsobené úmyslně či z nedbalosti.
- 8. Pokud se na motoru objeví vada, za kterou Zhotovitel neodpovídá a která je způsobilá významným způsobem ovlivnit termín plnění, zavazují se Smluvní strany zahájit jednání o prodloužení termínu plnění, a to o dobu odpovídající době potřebné k odstranění těchto vad.
- 7. The Contractor shall be liable, for the entire period when the Engine will be in the Contractor's control, for all damage caused by inappropriate use, negligence or by intentional action.
- 8. Should the Engine suffer a defect, which is not attributable to the Contractor, and which may considerably affect performance deadlines agreed hereunder, the Parties undertake to begin negotiations on extension of any affected deadlines, by the period equal to the time it will take to remedy such defects.

#### V. SPECIFIKACE VÝSLEDKŮ DÍLA:

- Výsledkem tvorby návrhu modifikace experimentálního letadla je podrobný projekt, který je zachycen v podobě technického návrhu a podrobné zprávy.
- 2. Výsledkem provedené integrace motoru do experimentálního letadla bude výměna původního motoru, který byl součástí experimentálního letadla při jeho zakoupení za motor dodaný Objednatelem a následné zajištění nezbytných povolení k létání v experimentálním modu, které budou Objednateli předloženy.
- 3. Objednatel požaduje ještě před zahájením prací souvisejících s integrací motoru do experimentálního letadla (tj. před příprav zahájením projektu těchto modifikací) předložení písemného prohlášení Zhotovitele, že motor dodaný Objednatelem ie plně kompatibilní experimentálního s druhem typem letadla v souladu všemi aplikovatelnými předpisy, podmínkami stanovenými touto Smlouvou a jejími přílohami.

#### **V. SPECIFICATION THE WORK RESULTS:**

- The outcome of the Aircraft Modification design shall be a detailed project for such Modification, in the form of technical design and detailed report.
- The outcome of the integration of the Engine into the Aircraft shall be the replacement of the original engine in the aircraft when purchased with the Engine supplied by the Client and the subsequent procurement of required flight permits in experimental mode, which shall be provided to the Client.
- 3. The Client requires, prior to commencing any work associated with integration of the Engine into the Aircraft (i.e. prior to commencing preparation of the project for such Modification), that the Contractor supplies a written declaration that the Engine supplied by the Client is fully compatible with the class, type and make of the Aircraft and according to all applicable regulations, terms of this Contract and its Annexes.





- 4. Výsledkem modifikace experimentálního letadla bude modifikované experimentální letadlo, které bude Objednateli předáno způsobem a za podmínek stanovených v článku VI. této Smlouvy. s modifikovaným letadlem bude Objednateli za stejných podmínek (zejména termín a místo předání) předán i původní motor experimentálního letadla, který byl z experimentálního letadla v rámci modifikace vyjmut.
- 5. Výsledkem provedení leteckých testů prostřednictvím testovacích pilotů (v rozsahu do180 leteckých hod) bude protokol o provedení testů výstupních dat testů, který bude obsahovat i) údaje o Objednateli a Zhotoviteli, ii) popis technických parametrů, iii) potvrzení o provedených testech uvedených specifikaci v Technické prostřednictvím testovacích pilotů, iv) záznam výstupních dat testů, v) datum a podpis Smluvních stran.
- 6. Výsledkem provádění běžné údržby bude každodenní záznam o jejím průběhu, v němž bude uvedeno i) datum, ii) stručný popis technického stavu, iii) stručný záznam provedených úkonů.
- 7. Veškeré zprávy a protokoly musí být přehledně strukturovány a zpracovány v dostatečné míře detailu, aby odborník v dané oblasti byl schopen posoudit správnost postupu Zhotovitele při řešení příslušné části Díla.
- 8. Výsledek Díla nebude považován za souladný s touto Smlouvou a provedení Díla za řádné v dané části, nebude-li splňovat požadavky uvedené výše a nebudou-li tyto nedostatky ani na základě výzvy Objednatele (resp. osoby pověřené kontrolou dle čl. XV. této Smlouvy odstraněny.

- 4. The outcome of the Aircraft Modification process shall be the Modified Aircraft (Modified Aircraft), which shall be delivered to the Client in accordance with Article VI. hereof. The Contractor shall also deliver to the Client, when delivering the Modified Aircraft, under the same terms (i.e. deadline, site) the original Aircraft engine, which had been removed from the aircraft prior to Modification.
- 5. The outcome of flight tests carried out by test pilots (in the extent to180 flight hours) shall be flight test protocol including any and all test output data including i) the Client's and the Contractor's data, ii) description of technical parameters, iii) confirmation on completion of tests as specified in the Technical Specification using test pilots, iv) records of test output data, v) date of signature by the Parties.
- Regular maintenance shall be demonstrated by daily records specifying i) date, ii) brief description of technical condition, iii) brief description of actions taken.
- 7. All reports and protocols shall be clearly structured and prepared in sufficient detail, so that any professional in this particular field is able to evaluate correctness of the actions taken by the Contractor when performing the respective part of the Work.
- 8. The outcome of the Work shall not be deemed to have been completed in compliance herewith or properly performed with respect to any of its parts, if it fails to meet the requirements defined above and if any defects thereof will not have been remedied on the basis of the Client's notification (respectively on the





basis of a notification issued by person authorized to perform control / inspections according to Art. XV. hereof).

# VI. POSOUZENÍ PLNĚNÍ, PŘEVZETÍ EXPERIMENTÁLNÍHO LETADLA A SPLNĚNÍ ZÁVAZKU:

# 1. Za účelem předběžného, průběžného i konečného posouzení výsledků činnosti Zhotovitele dle této Smlouvy ustaví Objednatel expertní skupinu, jejíž složení Zhotoviteli oznámí (dále jen "Expertní skupina"). Expertní skupina posuzuje, hodnotí a sleduje průběh realizace Díla po technické stránce.

2. Expertní skupina má právo účastnit se procesu modifikace experimentálního letadla jako pozorovatel. Zhotovitel se zavazuje umožnit členům Expertní skupiny nahlédnutí do všech projektů, návrhů, technických zpráv, záznamů i jiných souvisejících dokumentů, jakož i účast při provádění samotné modifikace experimentálního letadla.

#### <u>Převzetí modifikovaného experimentálního</u> letadla

3. Předání modifikovaného experimentálního letadla včetně původního motoru experimentálního letadla proběhne do 10 (slovy: deseti) pracovních dnů od dokončení 180 hod testovacích letů, nebo do 01. 07. 2019, a to dle toho, která z těchto skutečností nastane dříve.

# VI. ASSESSMENT OF EXECUTION, AIRCRAFT ACCEPTANCE AND FULFILMENT OF COVENANTS:

- The Client shall set up an expert panel to carry out preliminary, intermediate and final assessments of the results of the Contractor's activities hereunder; the Client shall advise the Contractor of the panel's composition (hereinafter the "Expert Panel"). The Expert Panel reviews and assesses the execution of the Work from the technical perspective.
- 2. The Expert Panel shall have the right to participate in the Aircraft Modification process as an observer. The Contractor undertakes to facilitate for the Expert Panel members to be able to inspect the project documentation, technical reports and other relevant documentation, as well as to physically participate in the actual Modification of the Aircraft.

#### **Modified Aircraft Acceptance process:**

3. Handover of the Modified Aircraft including the original engine shall take place within 10 (ten) business days from completing the 180 test flight hours but in no event later than by 1 July 2019.





- 4. Převzetí modifikovaného experimentálního letadla Objednatelem je podmíněno:
  - a) dokončením A-kontroly Zhotovitelem nebo dokončením alternativní roční kontroly a doručením výstupní zprávy o kontrole Objednateli. Člen (případně členové) Expertní skupiny je oprávněn zúčastnit se kontroly. Součástí kontroly bude boroskopová inspekce motoru modifikovaného experimentálního letadla;
  - b) provedením řádné kontroly letové způsobilosti modifikovaného experimentálního letadla a jeho systémů a předání záznamu výstupů této kontroly;
  - c) prokázáním a písemným potvrzením, že modifikované experimentální letadlo včetně jeho součástí jako jsou motory, avionika, podvozek, vrtule, atd., jsou v plném souladu se všemi použitelnými Servisními bulletiny a Příkazy zachování letové způsobilosti vydanými OEMs nebo EASA předtím, než byla nabídka Zhotovitele předložena Objednateli, a které mají být prováděny až po devět (9) měsíců od požadovaného data předání,
  - d) poskytnutím veškerých provozních příruček a příruček údržby nezbytných k zachování letové způsobilosti modifikovaného experimentálního letadla.

- 4. The Client shall take delivery of the Modified Aircraft under the following conditions:
  - a) Completion of A-Check by the Contractor or alternative Annual Check and delivery of the Final inspection report to the Client. Member(s) of the Expert Panel shall have the right to participate in such inspection. The inspection shall include a boroscope inspection of the Modified Aircraft Engine;
  - b) Completion of the airworthiness inspection of the Modified Aircraft and its systems and handover of respective inspections protocols associated therewith;
  - c) Demonstration and written declaration that the Modified Aircraft, including all its parts, be it engine, avionics, landing gear, propellers etc. are in full compliance with all relevant Service bulletins and Airworthiness Directives issued by OEMs or EASA prior to the Bid being submitted to the Client, and which shall be carried out up until 9 (nine) months after the required handover date,
  - d) Delivery of all operational manuals and maintenance instructions that are required in order to maintain airworthiness of the Modified Aircraft.





- 5. O převzetí modifikovaného experimentálního letadla bude sepsán protokol, který bude obsahovat alespoň i) údaje o Zhotoviteli a Objednateli, ii) podrobný technický popis modifikovaného experimentálního letadla, iii) zda Dílo je přebíráno s vadami či bez vad, iv) případně popis vad, v) lhůta pro jejich odstranění vi) datum a podpisy Smluvních stran, přičemž součástí předávacího protokolu budou dokumenty/potvrzení osvědčující splnění podmínek uvedených v tomto článku Smlouvy.
- 6. Speciální nástroje modifikované pro experimentální letadlo budou Objednateli předány do 15 (slovy: patnácti) dnů po skončení této Smlouvy.

#### Společná ustanovení pro přejímací řízení Joint provisions for the acceptance procedure and fulfilment of obligations:

Client.

7. Celé Dílo prováděné dle této Smlouvy bude považováno za dokončené, jakmile budou Objednateli Zhotovitelem předány veškeré výstupy dle čl. V. a VI. této Smlouvy.

a splnění závazku:

- 8. V průběhu přejímacího řízení Objednatel není povinen ověřovat správnost jakýchkoli výstupů a detailů technických řešení.
- 9. Posuzování a následné převzetí Díla nezbavuje Zhotovitele odpovědnosti za správnost a úplnost celého Díla.

- 5. Handover of the Modified Aircraft shall be subject to a protocol which shall include at least the following information) The Client's and the Contractor's information, ii) detailed technical description of the Modified Aircraft, iii) information whether the Work is delivered with or without defects, iv) description of any defects if delivered with defects, v) binding timeline for the removal of any such defects vi) data and signatures of the Parties; the Handover protocol shall include any and all documents / certificates demonstrating compliance with conditions set out above.
- 6. Any special instruments for the Modified Aircraft shall be delivered to the Client within 15 (fifteen) days after completion hereof.

7. The Work executed hereunder shall be

deemed to have been fully completed

once all reports, outcomes, certificates,

protocols and other documents foreseen in Articles V and VI. hereof will have been duly delivered by the Contractor to the

- 8. The Client shall not be obliged to verify correctness of any results, reports, outcomes, certificates, protocols etc. or details pertaining to technical solutions
- 9. Completed evaluation and subsequent acceptance of the Work does not release the Contractor from its liability for the correctness and completeness of the Work in part or as a whole.





10. Zhotovitel má právo odmítnout převzetí Díla v případě, že Dílo nebude v souladu se Smlouvou či jejími přílohami.

10.The Client is entitled to refuse the handover of the Work if the Work is not compliant with the Contract and its Annexes.

#### VII. DOBA PLNĚNÍ – HARMONOGRAM

- 1. Tato Smlouva se uzavírá na dobu určitou, a to do kompletního, řádného a v termínech výslovně stanovených touto Smlouvou provedeného Díla dle čl. III. této Smlouvy.
- 2. Zhotovitel se zavazuje provádět Dílo v souladu s harmonogramem uvedeným v rámci Technické specifikace (Schedule Deliverables; dále and ien "Harmonogram").
- 3. Zhotovitel se zároveň zavazuje dodržet pro jednotlivé postupy a řešení lhůty uvedené ve své nabídce podané v rámci Zadávacího řízení.

#### VIII. MÍSTO A PODMÍNKY PLNĚNÍ:

- 1. Nedohodou-li se Smluvní strany jinak, nebo není-li Smlouvou určeno jinak je místem plnění Česká republika. Modifikace experimentálního letadla bude probíhat na určeném Zhotovitelem místě odsouhlaseném Objednatelem, přičemž takové místo může být stanoveno i mimo Českou republiku.
- 2. Zhotovitel se zavazuje dodat modifikované experimentální letadlo za podmínek DDP INCOTERMS® 2010, přičemž přesné místo a čas dodání v rámci České republiky Objednatel Zhotoviteli upřesní do 30. 06. 2018.

#### IX. PŘECHOD VLASTNICKÉHO PRÁVA K MODIFIKOVANÉMU EXPERIMENTÁLNÍMU LETADLU

Vlastnické právo k modifikovanému experimentálnímu letadlu a původnímu motoru experimentálního letadla přechází

#### VII. TERM – TIME SCHEDULING

- 1. This Contract is concluded for a definite period until full, proper and timely (within deadlines defined in Article III. hereof) completion of execution of the Work hereunder.
- 2. The Contractor undertakes to execute the subject-matter of the Work in line with the timeline defined in the Technical Specification (Schedule and Deliverables; hereinafter the "Schedule").
- 3. The Contractor undertakes to observe deadlines set forth for individual processes and solutions as provided in his Bid submitted in the Tender.

#### **VIII. PLACE OF DELIVERY:**

- 1. Unless agreed otherwise by the Parties or in this Contract, the place of performance shall be the Czech Republic. Modification of the Modified Aircraft shall take place at the site defined by the Contractor and agreed with the Client, and the site may be located outside of the Czech Republic.
- 2. The Contractor undertakes to deliver the Modified Aircraft pursuant to INCOTERMS® 2010, and the Client shall provide specific time and place of delivery to the Contract by 30 June 2018.

#### IX. TRANSFER OF OWNERSHIP RIGHTS TO **THE Modified Aircraft**

The ownership rights to the Work / Modified Aircraft and to the original Aircraft engine shall pass to the Client upon its delivery pursuant to





Objednatele jeho předáním dle článku VI. odst. 3 až 5 této Smlouvy. Stejným okamžikem přechází na Objednatele také nebezpečí škody na Díle.

terms defined in Article VI. para 3 to 5 hereof. The risk shall pass to the Client at the same moment.

#### X. CENA DÍLA, FAKTURACE, PLACENÍ:

#### 1. Celková (maximální) cena Díla je stanovena na základě nabídky Zhotovitele na částku v celkové maximální možné výši EUR 5.222.138,- bez DPH (slovy: pět milionů dvě stě dvacet dva tisíc sto třicet osm euro bez DPH), tj. EUR vč. DPH: nepoužito (dále jen "Cena Díla"). Podrobný rozpis Ceny Díla je uveden v příloze č. 4 této Smlouvy (Quotation Template) ve formě položkového rozpočtu vycházejícího z Technické specifikace a podmínek této Smlouvy.

- Celková (maximální) cena leteckých hodin Testovacích inženýrů je stanovena na základě nabídky Zhotovitele na částku v celkové maximální možné výši EUR 590,bez DPH (slovy: pět set devadesát euro bez DPH)/1 hod testovacího letu, tj. EUR vč. DPH (nepoužito; dále jen "Cena Testovacích inženýrů").
- 3. Zhotovitel výslovně prohlašuje, že je plně seznámen s rozsahem a povahou požadavků Objednatele na Dílo, veškeré dodávky, služby a práce, které jsou předmětem Smlouvy, a že Dílo správně vymezil, vyhodnotil a ocenil, a to včetně veškerých dodávek, služeb a práce, které jsou nezbytné pro řádné splnění závazku Zhotovitele ze Smlouvy, a že při stanovení ceny dle této Smlouvy:
  - a) přihlédl ke skutečnostem uvedeným v čl.

# X. PRICE OF WORK; INVOICING; PAYMENT:

- 1. The total (maximum) price of Work has been set forth on the basis of the Contractor's Bid in the amount not exceeding the maximum possible amount of 5.222.138,-EUR, excluding VAT (in words: five million two hundred twenty two tousand one hundred thirty eight EUR, excluding VAT), i.e. EUR including VAT: N/A (in words: not applicable) (hereinafter the "Price"). Detailed breakdown of the Price is provided in Annex 4 hereto (Quotation Template) in the form of itemized budget based on the Technical Specified and terms hereof.
- 2. The total (maximum) price of flying hours of the test engineers has been set forth on the basis of the Contractor's Bid in the amount not exceeding the maximum possible amount of EUR 590,- excluding VAT (in words: five hundred and ninety EUR, excluding VAT), i.e. EUR including VAT: N/A (in words: not applicable) (hereinafter the "Price of test engineers").
- 3. The Contractor expressly declares that he has been fully briefed by the Client about the extent and nature of the Client's requirements with respect to the resulting Work and all supplies, services and work which form the subject-matter hereof, and that he has correctly specified, evaluated and priced the Work, including all supplies, services and work which may be necessary to meet the obligations assumed by the Contractor hereunder, and that he considered, in defining the Price, the following aspects:
  - a) the facts mentioned in Article III





III. odst. 1 a 2 této Smlouvy;

- b) zohlednil místní podmínky pro zhotovení a předání Díla a pro provedení souvisejících služeb a prací,
- c) zohlednil všechny technické a obchodní podmínky uvedené ve Smlouvě.
- 4. Cena Díla a Cena Testovacích inženýrů zahrnuje veškeré plnění Zhotovitele bezprostředně směřující ke splnění požadavků Objednatele na řádné provedení Díla dle této Smlouvy, veškeré náklady Zhotovitele nutné k realizaci Díla a k jeho předání Objednateli včetně cestovních.
- 5. S ohledem na to, že Cena Díla i Cena Testovacích inženýrů je konečná a nepřekročitelná, nemá Zhotovitel nárok na zaplacení jakékoli částky nad rámec Ceny Díla/Ceny Testovacích inženýrů, ledaže bude mezi Zhotovitelem a Objednatelem řádně ujednána změna závazku ze Smlouvy ve smyslu ZZVZ. O takové změně bude sjednán písemný dodatek k této Smlouvě.
- 6. Smluvní strany se dohodly, že Zhotovitel je oprávněn fakturovat Cenu Díla v následujících termínech:

paragraph 1 and 2 hereof;

- b) Local conditions for executing and delivering the Work and performing the associated services and works,
- c) the Contractor correctly and fully reflected any and all technical and commercial conditions defined herein.
- 4. The Price and the Price of test engineers shall cover any and all performance provided by the Contractor in order to fulfil all of the Client's requirements to properly execute and deliver the Work hereunder, and includes all costs accrued by the Contractor during the execution of the Work and its delivery to the Client incl. all travel expenditure, fees, customs duties and insurance as well as all claims of the Contractor that may arise on the basis of intellectual property laws.
- 5. Considering the fact that the Price and Price of test engineers defined herein are final and cannot be exceeded, the Contractor shall have no right to any payment in excess of the Price/Price of test engineers, unless the Client and the Contractor duly agree on a change of the commitment hereunder within the meaning of PPA. Any such change shall be subject to concluding a written amendment hereto.
- 6. The Parties have agreed that the Contractor shall be authorized to invoice the Price of the Work as follows:

Rozsah fakturované částky (vyjádřen % z Ceny Díla)	Fakturace vázána na splnění milníku	Deliverable	Invoicing (invoice issue) of Deliverable Price
35%	prokázání vlastnického práva Zhotovitele k vybranému experimentálnímu letadlu	35%	Once the Contractor provides a proof of ownership to the selected experimental aircraft for Modification
5%	předběžné posouzení návrhu modifikací	5 %	after completion of Preliminary Design Review



# EUROPEAN UNION European Structural and Investing Funds Operational Programme Research, Development and Education



15 %	kompletace dokumentace a výkresů k provedení modifikací na experimentálním letadle a specifikaci konstrukce systému sběru dat včetně příslušné dokumentace	15 %	after completion of Detail Aircraft Modification Design Documents and drawings and Data Acquisition System Design Specifications with sufficient documentation
15 %	Provedení modifikací na experimentálním letadle a přípravě modifikovaného experimentálního letadla na integraci motoru	15 %	after Aircraft Modifications are Completed and ready to accept engine
15 %	dokončení prvního letu do České republiky	15 %	after the completion of the first flight in the Czech Republic
10 %	dokončení prvních 150 hodin testovacích letů	10 %	after the completion of the first 150 flight test hours
5 %	předání modifikovaného experimentálního letadla Objednateli	5 %	after Modified Aircraft delivery to the Client

- 7. Smluvní strany se dohodly, že Zhotovitel je oprávněn fakturovat Cenu Testovacích inženýrů dle skutečného počtu uskutečněných leteckých testovacích hodin, a to vždy na konci kalendářního měsíce, v němž byly letecké testovací hodiny uskutečněny.
- 7. The Parties have agreed that the Contractor shall be authorized to invoice the Price of test engineers according to the real number of provided test flying hours at the end of the relevant calendar month.
- K jednotlivým platbám je fakturována DPH v souladu s platnými právními předpisy.
- 8. VAT shall be imposed on top of all payments made hereunder according to valid legislation.
- 9. Lhůta splatnosti faktur je šedesát (60) dnů od data jejich doručení Objednateli (dále jen "Lhůta splatnosti"). Objednatel není v prodlení s úhradou faktur po dobu, po kterou mu nebyla předložena záruční listina ve smyslu čl. XII. této Smlouvy. Zaplacením účtované částky se rozumí den jejího odeslání na účet Zhotovitele. Daňové doklady faktury vystavené Zhotovitelem podle této Smlouvy budou v souladu s příslušnými právními předpisy České republiky obsahovat zejména tyto údaje:
- 9. The due date of all invoices issued hereunder shall be 60 (sixty) days from the date of their delivery to the Client (hereinafter the "Due Date"). The Client shall not be in default with the remittance of the Price or any portion thereof till the Contractor provide the original of the guarantee according to Article XII. A payment of the amounts invoiced shall be understood to be effected on the day such are remitted to the bank account of the Contractor. The tax documents - invoices issued by the Contractor hereunder shall comply with all applicable legal regulations of the Czech Republic and include the following data:





- a) obchodní firmu/název a sídlo Objednatele,
- b) daňové identifikační číslo Objednatele,
- c) obchodní firmu/název a sídlo Zhotovitele,
- d) daňové identifikační číslo Zhotovitele,
- e) evidenční číslo daňového dokladu,
- f) rozsah a předmět plnění,
- g) datum vystavení daňového dokladu,
- h) datum uskutečnění plnění, pokud se liší od data vystavení daňového dokladu,
- i) Ihůtu splatnosti,
- j) příslušnou část Ceny Díla,
- k) prohlášení, že účtované plnění je poskytováno pro účely projektu "Výzkumná infrastruktura pro letectví a kosmické technologie", reg. č. CZ.02.1.01/0.0/0.0/16\_017/0002620, a to dle písemné instrukce Objednatele ,

- a) Commercial name and seat of the Client
- b) Tax identification number of the Client
- c) Commercial name and seat of the Contractor
- d) Tax identification number of the Contractor
- e) Number of the tax document invoice
- f) Quantity (extent) and nature of performance supplied or services rendered
- g) The date of issue of the tax document invoice
- h) The day of the supply of performance, in so far as it differs from the issue date of the tax document – invoice
- i) Due Date
- j) The respective part of the Price
- k) Statement that the performance is provided in connection with the Project "Research infrastructure for Aircraft and Cosmic technologies", Reg. No. CZ.02.1.01 /0.0/ 0.0/ 16\_017/ 0002620, pursuant to the respective order, or instruction in writing from the Client.

a dále musejí být v souladu s dohodami o zamezení dvojího zdanění, budou-li se na konkrétní případ vztahovat. Objednatel je oprávněn požadovat, aby Cena Díla byla uvedena dle jím stanovených položek. Tento požadavek musí Zhotoviteli sdělit v dostatečném předstihu.

and, furthermore, the tax documents – invoices shall also be in compliance with agreements on avoidance of double taxation, if applicable in particular cases. The Client is entitled to request itemization of the Price in accordance with his determination. The Client is obliged to inform The Contractor about this request in advance.





- 10. Poslední faktura v každém kalendářním roce musí být Zhotovitelem doručena Objednateli nejpozději do 15. prosince daného kalendářního roku. Pokud daňový faktura nebude vystavena v souladu s platebními podmínkami stanovenými Smlouvou nebo nebude splňovat požadované zákonné náležitosti nebo nebude-li doručena Objednateli do termínu uvedeného výše, je Objednatel daňový doklad oprávněn - fakturu Zhotoviteli vrátit jako neúplnou, resp. nesprávně vystavenou, k doplnění, resp. novému vystavení ve lhůtě pěti (5) pracovních dnů od data jejího doručení Objednateli. V takovém případě Objednatel není v prodlení s úhradou Ceny Díla nebo její části a Zhotovitel vystaví opravenou fakturu s novou shodnou lhůtou splatnosti, která začne plynout dnem doručení opraveného nebo nově vyhotoveného daňového dokladu - faktury Objednateli.
- no later than on December 15 of that calendar year. Should a tax document invoice not be issued in compliance with payment terms defined herein or should it not meet the statutory requirements, or if it should not be delivered to the Client by deadlines set hereunder, the Client is entitled to return the tax document-invoice back to the Contractor as incomplete, or incorrectly issued, for its correction, or reissue, within five (5) business days from the date of its delivery to the Client. In such a case, the Client shall not be in default with the remittance of the Price or any portion thereof, and the Contractor shall issue a corrected invoice with a new identical due date which shall commence to run on the day of delivery of the corrected or re-issued tax document-invoice to the Client.

10. The last invoice of each calendar year must

be delivered by the Contractor to the Client

- 11. Fakturační údaje Objednatele jsou uvedeny v čl. I. této Smlouvy.
- 11. The Client's invoicing details are given in Art. I hereof.
- 12. Zaplacení faktur vystavených Zhotovitelem nepředstavuje převzetí Díla nebo jeho části, ani prohlášení o bezvadnosti účtovaných plnění či konkludentní akceptaci bezvadnosti Díla nebo jeho části.
- 12. No payment on invoice issued by the Contractor shall constitute acceptance of the Work or its part or a statement on flawlessness of invoiced performance or conclusive acceptance of flawlessness of the Work or its part.
- 13. Zhotovitel není oprávněn provádět jednostranné započtení svých pohledávek vůči Objednateli.
- 13. The Contractor shall not be authorized to perform unilateral set offs of its receivables against the Client.

#### XI. ZÁRUKY, ZÁRUČNÍ A MIMOZÁRUČNÍ SERVIS:

# XI. WARRANTY, WARRANTY AND POST-WARRANTY SERVICE:

- 1. Dílo má vady, jestliže provedení Díla či jeho části neodpovídá výsledku stanovenému touto Smlouvou.
- 1. The Work shall be deemed to be defective if its implementation or its parts fail to correspond to the results / outcomes defined herein.





- Zhotovitel odpovídá za vady, jež má Dílo či jeho část v době jeho předání a převzetí. Dále odpovídá za vady Díla zjištěné po celou dobu záruční lhůty (záruka za jakost).
- The Contractor shall be liable for any defects on the Work or any of its parts at the time of its handover and acceptance, as well as for defects that may be discovered on the Work or its parts during the entire warranty period (quality guarantee).
- Zhotovitel poskytuje záruku za jakost 3. modifikací provedených na experimentálním letadle v délce24měsíců. Záruční doba začíná plynout ode dne převodu vlastnického práva k modifikovanému experimentálnímu letadlu na Objednatele.
- 3. The Contractor shall provide quality guarantee for the Modification for 24 months. The warranty commences running from the date on which the ownership rights to the Modified Aircraft passed to the Client.
- 4. Požadavek na odstranění vad provedených 4. modifikací experimentálního letadla v záruční době uplatní Objednatel písemnou formou u Zhotovitele bez zbytečného odkladu po jejich zjištění, nejpozději v poslední den záruční doby (dále jen "Reklamace"). I Reklamace odeslaná Objednatelem poslední den záruční doby se považuje za včas uplatněnou.
- Any requests to remove defects on the Work or its part during the warranty period shall be exercised in writing by the Client against the Contractor without undue delay after such were discovered, no later than on the last day of the warranty period (hereinafter the "Warranty Claim"). Warranty Claim transmitted by the Client even on the last day of the warranty period shall be deemed to have been exercised in time.
- Zhotovitel se zavazuje prověřit Reklamaci, oznámit Objednateli, zda Reklamaci uznává, a písemně sdělit termín odstranění vady do 2 týdnů ode dne doručení Reklamace Zhotoviteli.
- 5. The Contractor undertakes to review all submitted Warranty Claims, notify the Client whether he recognizes the claim, and inform the Client in writing on the deadline for the removal of the defect within 2 (two) weeks of the date on which the claim was delivered to him by the Client.
- Zhotovitel se zavazuje reklamované vady 6. modifikace experimentálního letadla bezplatně odstranit, a to bez zbytečného odkladu.
  - The Contractor undertakes to remedy any claimed defects on the Work or its parts free of charge and without undue delay.





- Maximální termín pro odstranění vady je 30 dnů ode dne doručení Reklamace, nebylo-li mezi Zhotovitelem a Objednatelem dohodnuto jinak a umožňuje-li to charakter vady.
- . The maximum period for the removal of a defect shall be 30 business day from the date the Warranty Claim was notified to the Contractor, unless the Client and the Contractor agree otherwise and the nature of the makes defect such alternative deadline feasible.
- Zhotovitel je povinen ve stanovené lhůtě odstranit vady modifikovaného experimentálního letadla i v případě, kdy podle jeho názoru za vady neodpovídá.
- 3. The Contractor shall be obliged to remove defects on the Work also in instance when the Contractor is of the opinion that he is not liable for such defects.
- 9. Náklady na odstranění vad v těchto sporných případech nese až do vyjasnění nebo do vyřešení rozporu Zhotovitel.
- 9. Cost accrued in connection with the removal of defects in these disputable cases shall be borne by the Contractor until such dispute is resolved.
- 10. O odstranění reklamované vady sepíší Smluvní strany protokol, ve kterém potvrdí odstranění vady. O dobu, která uplynula mezi uplatněním Reklamace a odstraněním vady se prodlužuje záruční doba.
- 10. Removal / remedy of claimed defect shall be subject to a protocol in which the Contractual Parties confirm the defect's removal. The warranty period shall be extended by any period that passed between the Warranty Claim notification and actual removal of the defect.
- 11. Zhotovitel je povinen poskytnout na žádost Objednatele i mimozáruční a pozáruční servis modifikovaného experimentálního letadla. Mimozáručním a pozáručním servisem se rozumí zejména aktualizace softwaru, odstraňování vad v době platnosti záruky, pokud Zhotovitel nemá povinnost vadu odstranit v rámci záruky, opravy, výměny vadných dílů а poskytnutí dílů v případě náhradních iakéhokoliv opotřebení. Cena za poskytování mimozáručního a pozáručního servisu bude stanovena na základě dohody Smluvních stran.
- The Contractor shall be obliged to provide, at the Client's request, extra-warranty and post-warranty service on the Modified Aircraft outside the existing warranty. Extra-warranty and post -warranty service shall be principally understood as software upgrades, removal / remedy of defects during the warranty period in cases where the Contractor has no obligation to remove / remedy the defects within the framework of the warranty itself, repairs and replacements of defective parts and provision of spare parts due to wear. The price for service outside the existing warranty shall be defined by agreement between the Parties.





- 12. Úkony Smluvních stran zakládají nároky dle tohoto článku Smlouvy, jsou-li učiněny písemnou formou nebo formou elektronické komunikace jedním ze zástupců dotčené Smluvní strany dle čl. XXI. odst. 1 a 2. Smlouvy na adresu druhé Smluvní strany dle čl. I. Smlouvy.
- 12. Acts of the Parties shall constitute claims pursuant to this Article if made in writing or by electronic means of communication by one of the representatives of the Parties appointed in Art. XXI Section 1 and 2 hereof and delivered to the address of the other Party pursuant to Art. I hereof.

#### XII. BANKOVNÍ ZÁRUKA

#### XII. BANK GUARANTEE

Zhotovitel před vystavením první faktury dle článku Χ. této Smlouvy poskytne Objednateli originál záruční listiny (bankovní záruky) za řádné provedení Díla a řádný převod vlastnického práva k modifikovanému experimentálnímu letadlu na Objednatele ve výši 35 % Ceny Díla uvedené v čl. X této Smlouvy platné po celou dobu provádění Díla až do převodu vlastnického práva k modifikovanému experimentálnímu letadlu na Objednatele. Zhotovitel prohlašuje, že bankovní záruka je neodvolatelná, nepodmíněná a splatná na první výzvu, tj. bankovní záruka umožňuje bezpodmínečné čerpání bankovní záruky, zejména bez možnosti banky uplatnit jakékoliv námitky ve smyslu § 2035 OZ a bez nutnosti výzvy věřitele (Objednatele) dané dlužníkovi (Zhotoviteli) k plnění jeho povinností, v případě nesplnění kterékoliv povinnosti Zhotovitele stanovené touto Smlouvou. Bankovní záruka za řádné kryje finanční nároky provedení Díla Objednatele vůči Zhotoviteli (zákonné či smluvní sankce, náhradu škody, náklady spojené s převodem vlastnického práva vzniklé důvodů apod.), Z porušení povinností Zhotovitele týkajících se řádného provedení Díla v předepsané kvalitě a smluvené lhůtě, které Zhotovitel nesplnil ani po předchozí výzvě Objednatele.

The Contractor shall provide to the Client, by the date of execution hereof, the original of the guarantee (bank guarantee) securing proper execution of the Work and passage of the ownership title to the Modified Aircraft to the Client in the amount of 35 % of the Price as defined in Art. X hereof before the issuance of the invoice for the first part of Price: the guarantee shall remain valid and effective for the entire period of the Work being executed until the ownership title to the Modified Aircraft passes to the Client. The Contractor declares that the guarantee is irrevocable, unconditional and payable on demand, i.e. the bank guarantee permits unconditional draw down, without the bank having recourse to objections within the meaning of Section 2035 CC, without the need for the Client to notify the Contractor to observe his obligations, in all cases where the Contractor may default on any of his obligations defined herein. The bank guarantee securing the proper execution of the Work shall cover financial claims of the Client against the Contractor (statutory or contractual sanctions, damages, costs related to the transfer of ownership rights etc.), which may arise due to the breach of the Contractor's obligations in relation to the proper execution of the Work in agreed and timeframe. which quality Contractor failed to observe even after a prior notification by the Client.





- Zhotovitel je povinen do čtrnácti (14) kalendářních dnů po každém čerpání bankovní záruky Objednatelem (věřitelem) doručit Objednateli novou bankovní záruku (tj. příslušnou záruční listinu) ve shodném znění a výši jako měla čerpaná bankovní záruka, případně doplnit předmětnou bankovní záruku, z níž bylo čerpáno, do původní sjednané výše.
- 3. Nesplnění povinností uvedených v tomto 3. článku Smlouvy Zhotovitelem bude považováno za hrubé porušení Smlouvy.
- The Contractor shall be obliged, within 14 (fourteen) calendar days after each draw down against the bank guarantee by the Client (creditor), to deliver to the Client a new bank guarantee (i.e. the instrument) in the amount equal to the original bank guarantee prior to the draw down, or to top up the guarantee, from which the draw down was made, to the originally agreed amount.
  - Failure to observe the obligation stipulated in this Article by the Contractor shall be deemed to have constituted a material breach hereof.

#### XIII. PRÁVA DUŠEVNÍHO VLASTNICTVÍ

1. Část plnění spočívající v modifikaci experimentálního letadla prováděné dle čl. III. odst. 1 písm. b) až d) této Smlouvy bude považováno za autorské dílo na objednávku ve smyslu § 61 zák. č. 121/2000 Sb., o právu autorském, o právech souvisejících s právem autorským a o změně některých zákonů v platném znění. Zhotovitel udělí Objednateli bezúplatnou nevýhradní licenci k užití autorského díla v původní nebo zpracované či jinak změněné podobě tohoto autorského díla, pro všechny části tohoto autorského díla i jako celek, samostatně nebo v souboru, anebo ve spojení s jiným dílem nebo prvky či zařazením do díla souborného pro účely vyplývající z Projektu a/nebo z této Smlouvy a/nebo pro účely výzkumu a vzdělávání, a to dobu trvání majetkových k jednotlivým autorským dílům, a pro území Evropské unie.

#### **XIII. INTELLECTUAL PROPERTY RIGHTS**

1.

In the event that in connection with the execution of this Framework Contract the Work as a whole or any Deliverable thereof shall constitute a copyrighted work within the meaning of the Act No. 121/2000 Coll., on Copyrights, Rights Related to Copyright and on amendment of certain other Acts, as amended (hereinafter referred to as the "Copyright Act"), such will be considered as the Work under commission as defined in § 61 of the Copyright Act. In these cases the Contractor shall grant to the Client anonexclusive royalty-free licence to use the copyrighted work in its original, processed or other modified form of the copyrighted work, as a whole or any of its parts, individually, in a set, or in connection with any other work or elements or included in collection for the purposes of this Project and/or for the purposes defined herein and/or for the purposes of research and education activities, for the entire period of validity of copyright to each copyrighted work, on the territory of the European Union.





- V rámci licence poskytnuté podle čl. XIII. odst. 1 této Smlouvy Zhotovitel se svolením a zmocněním od autorů autorského díla Objednateli také uděluje souhlas zveřejnění, upravování, zpracovávání, překládání autorského díla či ke změně jeho názvu a dále též ke spojení tohoto autorského díla s dílem jiným či k zařazení jej do díla souborného. Objednatel je dále oprávněn ke všem ostatním jednáním a úkonům, které by mohly zasáhnout do osobnostních práv autorů autorského díla, nezbytné pro využití v rozsahu výše uvedeném. Objednatel může oprávnění dle tohoto odstavce vykonávat sám nebo prostřednictvím třetí osoby.
- Autorská díla (čl. XIII. odst. 1) a průmyslová práva (čl. XIII. odst. 3), jakož i další nehmotné statky (čl. XIII. odst. 4) jsou dále pro účely této Smlouvy společně nazývána jako práva vztahující se k předmětům duševního vlastnictví. V případě, že v souvislosti s plněním Smlouvy a/nebo v rámci Projektu vznikne Dílo nebo jeho část, které bude Zhotovitel oprávněn registrovat prostřednictvím některé z forem průmyslových práv (tj. ochranná známka, patent či vynález, užitný či průmyslový vzor, a další) chráněných dle platných právních předpisů českých, jiného státu nebo mezinárodní či nadnárodní organizace, udělí Zhotovitel Objednateli po dobu trvání ochrany příslušného druhu průmyslových práv bezúplatnou nevýhradní licenci k užití Díla pro účely Projektu a/nebo této Smlouvy a/nebo pro účely výzkumu a vzdělávání, ale rovněž v neomezeném rozsahu ke všem způsobům užití, a to pro území Evropské unie.
- Within the licence provided under Art. XIII Section 1 of this Contract, the Contractor shall, with a consent and authorisation of authors of the Work, give his consent also to release, modification, elaboration, and translation of the copyrighted work, as well as to change of its name or to connect this copyrighted work with another work or to include this copyrighted work in collection. It it's necessary for the full use of the licence in its above mentioned scope, the Client is also entitled to any other activities which may encroach upon personal rights of authors of the copyrighted work. The Client is entitled to exercise its rights under this Section itself or by a third person.
- Copyrighted work (Art. XIII Section 1) and industrial rights (Art. XIII Section 3), as well as another intangible goods are jointly referred to, for the purposes hereof, as intellectual property rights. In the event that the execution of this Framework Contract and/or the Project will result into Work or any part thereof, which the Contractor is entitled to register through form of industrial rights (i.e. trademark, patent or invention, utility or industrial design etc.) protected according to the valid legal regulation in the Czech Republic or in another country, or international or supra-national body, the Contractor undertakes to grant the Client a non-exclusive royalty-free license to use the Work for the purposes of the Project and / or this Contract and/or for the purposes of research and education activities, as well as for any unlimited other way of use on the territory of European Union.





- V případě, že v souvislosti s plněním Smlouvy a/nebo v rámci Projektu vznikne Dílo nebo jeho část, jehož obsahem bude předmět duševního vlastnictví, který nelze považovat za autorské dílo a/nebo předmět průmyslových práv, ale je schopen vyjádření v objektivně vnímatelné podobě a je důležitý pro naplnění této Smlouvy, zejména know-how, důvěrné informace, zlepšovací návrhy a další ("nehmotný statek"), udělí Zhotovitel Objednateli časově bezúplatnou neomezenou nevýhradní licenci k užití Díla pro účely Projektu a/nebo této Smlouvy a/nebo pro účely výzkumu a vzdělávání, ale rovněž v neomezeném rozsahu ke všem způsobům užití, a to pro území Evropské unie.
- In the event that in connection with the execution of this Framework Contract the Work or any of its parts shall constitute a subject of intellectual property, which could not be considered as a copyrighted work and/or a subject of industrial property rights, but is able to be expressed in an objectively perceptible form and is important for execution of this Contract, in particular the know-how, confidential information, improvement proposals and other ("intangible goods"), the Contractor shall grant to the Client a non-exclusive royalty-free licence to use the Work for the purposes of the Project and / or this Contract and/or for the purposes of research and education activities, as well as for any unlimited other way of use on the territory of European Union.
- Objednatel není bez předchozího souhlasu Zhotovitele oprávněn převést takto získaná práva k užití kteréhokoliv z předmětů duševního vlastnictví získaná ve smyslu č. XIII této Smlouvy zcela nebo zčásti třetí či poskytnout třetí podlicenci/podlicence. Objednatel se tímto zavazuje neposkytovat výsledky Díla třetím stranám bez předchozího souhlasu Zhotovitele. Zhotovitel ie oprávněn kterýkoliv z předmětů duševního vlastnictví (nebo jeho část)užít i mimo rámec a účel této Smlouvy.
- 5. Without the Contractors' previous consent, the Client is not entitled to transfer the exploitation rights of any subject intellectual property acquired accordance with Art. XIII of this Contract in whole or in part to a third person, or to sub-licence the above mentioned rights. The Client undertakes not to disclose the results of the Work to any third party without Contractors' previous consent. The Contractor is entitled to use any of the subjects of the intellectual property (or its part) even beyond the frame and the purpose of this Contract.
- 6. Zhotovitel se zavazuje předat Objednateli 6. kompletní dokumentaci, která vznikla při provádění modifikace a/nebo Díla či jeho části v souvislosti s plněním Smlouvy a/nebo v rámci Projektu a týkající se předmětů duševního vlastnictví podle článku XIII. Této Smlouvy.
  - . The Contractor undertakes to transfer the complete documentation created during the modification and / or the Work or its part in connection with the execution of this contract, which is relating to the subjects of intellectual property under the Art. XIII of this Contract.





- Zhotovitel prohlašuje, že mu nejsou známa žádná práva třetích osob vztahující se ke kterémukoliv předmětu duševního vlastnictví ve smyslu této Smlouvy. Zhotovitel se zároveň zavazuje, že práva poskytnutá Objednateli nejsou a nebudou nikým ani ničím omezena, a to ani z hlediska obsahového, množstevního, teritoriálního či časového. V případě porušení povinnosti Zhotovitele dle tohoto odstavce Zhotovitel povinen nahradit Objednateli veškerou újmu z toho vzniklou.
- 8. Práva vztahující se ke všem předmětům 8. duševního vlastnictví dle čl. XIII. přecházejí na právní nástupce Objednatele a/nebo na budoucího provozovatele modifikovaného experimentálního letadla pořízeného v rámci Projekt, a to na dobu trvání ochrany příslušného druhu průmyslových práv a/nebo na dobu trvání majetkových práv k autorským dílům či neomezeně k ostatním nehmotným statkům ve smyslu této Smlouvy.
- Smluvní strany prohlašují, že se dohodly tak, že odměna Zhotovitele za poskytnutí licence dle tohoto článku XIII. Smlouvy je již zahrnuta v Ceně Díla.
- 10. V případě, že dojde k porušení práv k předmětům duševního vlastnictví, která vznikla na základě této Smlouvy, je jejich vlastník / majitel oprávněn k jejich vymáhání u příslušných orgánů či úřadů. Nositel licence je povinen bez zbytečného odkladu informovat vlastníka / majitele práv k předmětům duševního vlastnictví v případě, že se o porušení dle předchozí věty dozví.

- of any rights of third persons relating to any subject of intellectual property within the meaning of this Contract. The Contractor undertakes, that the rights provided to the Client, are not and won't be in any way territorially or temporally limited, in particular not in its content or quantity. In case that the Contractor breaches the obligations under this Section, the Client is entitled to claim the damages arising from this breach.
- 8. The intellectual property rights according to Art. XIII shall pass to the legal successor of the Client or to the future operator of Aircraft purchased for the Project, for the duration of the protection period granted to that particular intellectual property right and/or period of existence of ownership rights to copyrighted work or without any restriction to other.
- . The Contractual Parties declare that they have agreed that the Contractor's remuneration for the provision of license pursuant to this Article XIII hereof has already been included in the Price for the Work.
- 10. In the event of a violation of the rights pertaining to the intellectual property created under this Framework Contract, their owner / proprietor shall be entitled to enforce these rights before the competent authorities. The bearer of the license shall be obliged to inform the owner / owners of intellectual property rights without delay in any case when he learns of a breach in accordance with the previous sentence.





- 11. V případě, že by Dílo nebo jeho část vzniklo společnou činností Zhotovitele a Objednatele, zavazují se obě Smluvní strany podat společnou přihlášku jakéhokoliv průmyslového práva jakožto jeho spolu přihlašovatelé s tím, že fyzické osoby podílející se na společném vytvoření Díla nebo jeho části budou spolupůvodci.)
- 12. Veškeré licence a další oprávnění podle tohoto článku Smlouvy jsou poskytovány jako neodvolatelné. Na udělení licencí a těchto dalších oprávnění nemá zánik Smlouvy vliv.
- 13. Veškerá další data, informace a výstupy z testovacích fází prováděných na základě a v souvislosti s touto Smlouvou a/nebo v rámci Projektu ("testovací data") budou bez dalšího náležet Objednateli a Zhotovitel je povinen bez prodlení testovací data Objednateli předat. Zhotovitel je oprávněn užít testovací data pouze pro účely a v rámci této Smlouvy, nesmí je poskytnout či jinak zpřístupnit třetím osobám, toliko s předchozím souhlasem Objednatele.

- 11. In the event that the Work or its part has been produced as a result of joint effort of the Contractor and the Client, the Contractual Parties undertake to submit a joint application for any industrial rights as co-applicants. All natural persons participating on the creation of Work or its part shall be co-authors.
- 12. All licences and other entitlements under this Article of the Contract shall be provided as irrevocable. Termination of the Contract has no influence on granting of licences.
- 13. Any further data, information and outputs of testing stages executed in framework or in connection with this Contract and/or with the project ("testing data") will immediately belong to the Client. The Contractor shall without any delays hand over the testing data to the Client. The Contractor is entitled to use the testing data only in connection and for the purposes of this contract. The Contractor shall not provide or disclose the testing data to any third person without a previous consent of the Client.

#### XIV. PRÁVA A POVINNOSTI SMLUVNÍCH STRAN

# XIV. RIGHTS AND OBLIGATIONS OF THE CONTRACTUAL PARTIES

- Zhotovitel se zavazuje plnit veškeré závazky vyplývající ze Smlouvy s odbornou péčí, na své náklady a na své nebezpečí, ve lhůtách stanovených v rámci Technické specifikace (Schedule and Deliverables) a za Cenu Díla dle čl. X. Smlouvy.
- Zhotovitel je povinen do 2 (slovy: dvou) kalendářních týdnů po podpisu této Smlouvy sdělit Objednateli organizační strukturu projektového týmu Zhotovitele (včetně kontaktů na jeho jednotlivé členy), který bude zahrnovat členy s následující rolí:
- 1. The Contractor undertakes to fulfil all of its commitments entered into hereunder with professional care, at its own cost and risk, and to observe the deadlines stipulated the Technical Specification (Schedule and Deliverables), for the Price set forth in Art. X hereof.
  - . The Contractor is obliged to provide the Client with the List describing organizational structure of his engineering team (including contact information of his members). This List shall include at least:





- a) Project Manager
- b) Electrical engineering leader
- c) Control systems engineering leader
- d) Mechanical engineering leader
- e) Flight Test engineering leader
- f) Instrumentation & data acquisition engineering leader
- g) Procurement & Sourcing Leader
- h) Head of Airworthiness
- Test pilot approved to fly the supplierselected experimental aircraft
- j) Aircraft Maintenance leader with Part 145 approval

- a) Project Manager
- b) Electrical engineering leader
- c) Control systems engineering leader
- d) Mechanical engineering leader
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- f) Instrumentation & data acquisition engineering leader
- g) Procurement & Sourcing Leader
- h) Head of Airworthiness
- Test pilot approved to fly the supplierselected experimental aircraft
- j) Aircraft Maintenance leader with Part 145 approval

Veškerá komunikace k příslušným otázkám bude probíhat prostřednictvím těchto členů projektového týmu.

All the communication will be acceptable via these appointed members of the engineering team.

- 3. Zhotovitel se zavazuje v souladu s Technickou specifikací umožnit Objednateli účast na testovacím letu prostřednictvím jím určených maximálně 2 (slovy: dvou) výzkumných inženýrů. Objednatel je povinen seznámit Zhotovitele v dostatečném předstihu s plánovanou účastí výzkumných inženýrů na testovacím letu a sdělit mu identifikační údaje těchto osob.
- Zhotovitel se zavazuje dodržet veškerá na 4. něj dopadající pravidla pro publicitu vyplývající ze závazné dokumentace OP VVV.
- 3. The Contractor is obliged (according to Technical specification) to enable the Client to have up 2 (two) research engineers of its own selection board during the flight testing. The Client is obliged to inform The Contractor about the intended participation of research engineers in the flight testing and provide the Contractor with identification data in advance.
- The Contractor undertakes to observe all publicity rules it may be required to observe under the OP RDE binding documentation.





- 5. Objednatel se zavazuje předat Zhotoviteli veškeré podklady, materiály nebo jiné informace, které jsou potřebné pro provedení Díla a které po něm Zhotovitel spravedlivě požaduje, avšak za podmínky, že Zhotovitel takový požadavek vznesl v dostatečném předstihu zajišťujícím splnění termínů provedení Díla.
- Contractor any and all source documents, materials or other information which are necessary for the execution of the Work and which the Contractor can reasonably request from the Client under the condition that the Contractor raised any such requirement with sufficient advance ensuring fulfilment of the deadlines for the execution of the Work.
- 6. Zhotovitel je povinen při provádění Díla průběžně a s náležitou odbornou péčí prověřovat vhodnost Technické specifikace Díla a další dokumentace a dokumentů, podle kterých je dle Smlouvy vymezen předmět a rozsah Díla a podle kterých je povinen Dílo provést.
- 6. The Contractor shall be required, in executing the Work hereunder, to constantly and with due professional care examine the suitability of the Technical Specification for the Work and other documentation that defines the subjectmatter and the scope of Work, according to which he is obliged to execute the Work.
- Zhotovitel je povinen prověřovat, zda jsou tyto dokumenty v souladu s platnými právními předpisy, pravidly, regulacemi, technickými standardy a normami České republiky i jiných států, je-li povinen se jimi řídit, a to před započetím prací, výkonů a služeb na Díle. Zhotovitel je zároveň povinen na nevhodnost dokumentů neprodleně písemně upozornit Objednatele. Zhotovitel je při provádění Díla povinen dodržovat veškeré normy a požadavky jakýchkoliv kolektivních smluv, souvisejících zákonů a nařízení, týkajících se ochrany, pojištění a řemeslné pomoci. Výše uvedené se vztahuje i na právní předpisy, normy a technická nařízení, která nejsou v této Smlouvě a jejích přílohách výslovně zmíněna.
- The Contractor is obliged to verify whether 7. these documents are in accordance with applicable laws, rules, regulations, technical standards and norms of the Czech Republic and other countries, and shall be required to follow them before commencing work, performance or service on the Work. The Contractor shall be also obliged immediately notify the Client in writing about any potential unsuitability documentation. The Contractor shall comply, in executing the Work, with all standards and requirements of collective agreements, related laws and regulations, protection orders, insurance and assistance. The above applies to legislation, standards and technical regulations which may not be explicitly mentioned herein or in Annexes.





- 8. Zhotovitel je povinen dodržovat i technické standardy tvorby projektu modifikace, dodávky materiálu, poskytování služeb a aplikace pracovních postupů a metod platné v zemi jeho sídla. V případě, že takové normy v zemi sídla Zhotovitele neexistují, mohou být po předchozí domluvě Smluvních stran použity normy jiného státu.
- 8. The Contractor shall comply with technical standards relating to drafting the Modifications project, delivery of materials, provision of services and application of procedures and methods applicable in the country of his seat. In the event that such standards in the country of the Contractor's seat do not exist, the Parties may agree on use of another set of relevant standards.
- 9. V případě, že v době předání Díla či jeho části dle této Smlouvy budou v účinnosti právní předpisy nebo technické normy Evropské unie nebo České republiky, upravující technické podmínky zboží a jeho provozování odlišně od právních nebo technických norem, účinných v době uzavření této Smlouvy, je Zhotovitel povinen zohlednit obsah takových norem či právních předpisů.
- In the event that at the time of delivery of the Work or any part thereof here under the laws or technical standards of the European Union or the Czech Republic, or technical conditions governing goods and its operation in force shall be different from legal or technical standards in effect at the time of conclusion hereof, the Contractor shall take into account the content of such standards or legislation.
- 10. Pokud Zhotovitel tuto povinnost dle odst. 7 shora nesplní, odpovídá za vady Díla tím způsobené. Je pak povinen uvést dílo na své náklady do souladu s platnými právními předpisy, pravidly, regulacemi a normami a odpovídá v plném rozsahu rovněž za další důsledky porušení této povinnosti, včetně náhrady škody, která v důsledku opomenutí Zhotovitele Objednateli tímto vznikne. Stejným způsobem je Zhotovitel povinen smluvně zavázat třetí osoby poddodavatele), které v souladu s touto Smlouvou použije k provedení Díla.
- 10. If the Contractor fails to meet this obligation stipulated in Section 7 above, he shall be liable for defects thus caused to the Work and shall be obliged to bring the Work in compliance with applicable laws, rules, regulations and standards at its own expense; the Contractor shall also be fully responsible for other consequences that may be associated with this particular breach, including damages that may arise to the Client due to such omission on the part of the Contractor. The Contractor shall be obliged to contractually oblige any third parties (its subcontractors) which he may use, in accordance herewith, in executing the Work.
- 11. Zhotovitel je povinen při plnění této Smlouvy zohlednit veškeré požadavky Objednatele směřující k dosažení nejvyšší kvality předmětu plnění dle této Smlouvy, nejsou-li v rozporu s právními předpisy.
- 11. The Contractor shall be obliged to take into account, in the execution of the Work hereunder, all requirements of the Client that are aimed at achieving the highest quality of the objectives hereof, unless such are contrary to the law.





- 12. Zhotovitel ie povinen informovat Objednatele o postupu prací na realizaci Díla, a to nejméně jednou za měsíc formou elektronické zprávy. Zhotovitel je povinen průběžně zpracovávat postup prací do zpráv a tyto předkládat Objednateli k nahlédnutí při kontrolních dnech (design review) a pracovních schůzkách konaných dle této Smlouvy, případně k žádosti Objednatele v dostatečném časovém předstihu před pracovní schůzkou nezbytném pro řádné seznámení Objednatele s průběžnou zprávou.
- 12. The Contractor shall be obliged to inform the Client on the progress achieved in the Work's execution, at least once each month by e-mail. The Contractor shall be obliged to elaborate interim reports on the progress, and to submit these reports to the Client for review during inspections days (design reviews) taking place according to this Contract, or upon the Client's request, in sufficient advance prior to such inspection that will enable the Client to familiarize himself with the interim report.
- 13. Zhotovitel se za podmínek stanovených touto Smlouvou, v souladu s pokyny Objednatele a při vynaložení veškeré potřebné odborné péče, zavazuje:
- 13. The Contractor undertakes, under the terms and conditions hereof, in accordance with instructions issued by the Client and using all due professional care, to:
- i. archivovat veškeré písemnosti zhotovené pro plnění předmětu dle Smlouvy a kdykoli po tuto dobu umožnit Objednateli k těmto přístup archivovaným písemnostem, a to do roku 2033. Objednatel oprávněn po uplynutí 10 let od ukončení plnění podle Smlouvy od Zhotovitele výše uvedené dokumenty bezplatně převzít; k dodržení této povinnosti je Zhotovitel povinen zavázat také své případné subdodavatele.
- duly archive i. all written material prepared in connection with execution of the Work hereunder and to provide access to the Client to these archived documents until the end of 2038. The Client shall be entitled to take possession of these documents after 10 (ten) years from completion of the Work hereunder from the Contractor free of charge; the Contractor shall contractually bind its potential subcontractors to adhere to the same rules.
- ii. spolupůsobit při výkonu finanční kontroly dle zákona č. 320/2001 Sb., o finanční kontrole, v platném znění, mj. umožnit Řídicímu orgánu OP VVV přístup k těm částem nabídky podané v Zadávacím řízení, Smlouvy, Objednávek, dílčích smluv o dílo a souvisejících dokumentů, které podléhají ochraně podle zvláštních právních předpisů za předpokladu, že budou splněny všechny požadavky právních předpisů na způsob provádění takové kontroly; k dodržení této povinnosti je Zhotovitel povinen zavázat také své
- ii. cooperate during financial inspections carried out in accordance with Act 320/2001 Coll., on Financial Inspections, as amended, i.e. to allow the Managing Authority of the OP RDE to access also those portions of the tender (bid) submitted within the Tender, the Contract, Orders, partial work contracts and related documents which may be protected by special legal regulation, given that all requirements set forth by legal regulation with respect to the manner of executing such inspections will have been observed; the Contractor





případné subdodavatele.

shall bind any of its sub-contractors to comply with this obligation accordingly.

#### XV. KONTROLA ZE STRANY OBJEDNATELE

# 1. Jednatel nebo jím pověřená fyzická nebo právnická osoba, včetně členů Expertní skupiny, jsou oprávněni provádět kontrolu činnosti Zhotovitele, která souvisí s plněním práv a povinností plynoucích z této Smlouvy. Pověřený zástupce Objednatele může v době a způsobem, který nenaruší provozní činnosti Zhotovitele či bezpečnost provozu, provádět kontrolu, zda je Dílo realizováno řádně, pečlivě a v souladu s touto Smlouvou. Zhotovitel je povinen umožnit Objednateli pozorování a kontrolu provádění příslušných činností.

- 2. V případě, že dochází z pohledu Objednatele k porušení povinností stanovených touto Smlouvou, je Objednatel oprávněn vyzvat Zhotovitele ke zjednání nápravy. Zhotovitel je povinen takovému požadavku vyhovět. V případě, že Zhotovitel s návrhem nesouhlasí, Smluvní Strany postupují v souladu s článkem XXI. této Smlouvy.
- 3. Objednatel má právo vyzývat Zhotovitele k 3. jednání, na kterých je Zhotovitel povinen poskytovat požadovaná vysvětlení k dotazům Objednatele bezprostředně se týkajících realizace Díla. Objednatel je oprávněn požádat třetí osobu o provedení kontroly plnění Smlouvy a Zhotovitel je povinen se třetí osobou spolupracovat tak, jako kdyby se jednalo o požadavky Objednatele.

#### XV. CONTROL BY THE CLIENT

- 1. The Client or a natural or legal person authorized by him, including members of the Expert Panel shall be entitled to inspect the Contractor's activities which are related to the fulfilment of the rights and obligations hereunder. The Client's authorized representative may, in a manner and time that does not interfere with the Contractor's operational activities or safety or operations, check whether the Work is carried out properly, carefully and in accordance herewith. The Contractor shall be required to allow the Client to observe and monitor implementation of relevant activities.
- 2. In the event that the Client arrives at the opinion that the Contractor is committing a breach of his obligations hereunder the, the Client shall be entitled to ask the Contractor to remedy the situation. The Contractor shall be required to meet such requirement. In the event that the Contractor does not agree, the Parties shall act in accordance with Article XXI. hereof.
  - . The Client has the right to invite the Contractor to discussions, where the Contractor shall be obliged to provide the Client with the requested clarifications to questions related to executed Work. The Client shall be entitled to request a third party to inspect the progress on the subject-matter of this Contract and the Contractor shall be obliged to cooperate with such third party as if such third party were the Client.





- 4. Smluvní strany souhlasí, že v průběhu provádění Díla na základě této Smlouvy budou svolány alespoň 3 kontrolní dny (design review), kterých se zúčastní zástupci Smluvních stran pro technické záležitosti uvedení v čl. XXI. Přesný termín je stanoven v Technické specifikaci. Tyto kontrolní dny se budou konat v sídle Objednatele.
- 4. The Parties agreed that in the course of the performance hereunder there shall be at least three inspections (design reviews), which will be attended by representatives of the Parties for technical matters as stipulated in Art. XXI. The precise date shall be specified in the Technical Specification. These inspections will be held at the headquarters of the Client.
- 5. Další pracovní schůzky se budou konat 5. v průběhu plnění závazku z této Smlouvy dle potřeby a na základě předchozí domluvy Smluvních stran. Nebude-li dohodnuto Smluvními stranami jinak, místo jejich konání se bude pravidelně střídat a bude jím sídlo Objednatele a sídlo Zhotovitele.
- Additional working meetings will be held during the performance hereof as required based upon a prior arrangement between the Parties. Unless agreed otherwise by the Parties, their venue will rotate evenly and it will be either the seat of the Client or the Contractor.
- 6. Každá ze Smluvních stran nese náklady spojené se svojí účastí při jednání v sídle druhé Smluvní strany ze svého; náklady, které však vzniknou v důsledku pochybení, vadného plnění nebo porušení ujednání Smluvních stran, hradí ta Smluvní strana, která se porušení dopustila.
- 6. Each Party shall bear the costs associated with their participation in meetings at the headquarters of the other Party; costs incurred as a result of misconduct, defective performance or breach of agreement between the Parties shall be borne by the Party which has committed such breach.

#### XVI. SOUČINNOST SMLUVNÍCH STRAN

#### XVI. COOPERATION BETWEEN THE PARTIES

- Smluvní strany se zavazují vyvinout veškeré úsilí k vytvoření potřebných podmínek pro realizaci Díla dle podmínek stanovených touto Smlouvou, které vyplývají z jejich smluvního postavení. To platí i v případech, kde to není výslovně stanoveno ustanoveními této Smlouvy.
- 1. The Parties undertake to make every effort to create the necessary conditions for the execution of Work under the conditions specified herein. This shall also apply in cases where it is not expressly provided in the provisions hereof.
- 2. Pokud jsou kterékoli ze Smluvních stran 2. známy skutečnosti, které jí brání nebo budou bránit, aby dostála svým smluvním povinnostem, sdělí tuto skutečnost neprodleně písemně druhé Smluvní straně. Smluvní strany se dále zavazují neprodleně odstranit v rámci svých možností všechny okolnosti, které jsou na jejich straně a které brání splnění jejich smluvních povinností.
- 2. If either Party learns about facts that may prevent or will prevent it from honouring its contractual obligations, it shall immediately notify the other Party in writing. The Parties further agree to immediately rectify all circumstances, within their means, that may hinder their own fulfilment of contractual obligations.





- 3. Zhotovitel se zavazuje, že na základě skutečností zjištěných v průběhu plnění povinností dle této Smlouvy navrhne a provede opatření směřující k dodržení podmínek stanovených touto Smlouvou pro její naplnění, k ochraně Objednatele před škodami, ztrátami a zbytečnými výdaji, a že poskytne objednateli, zástupci Objednatele jednajícímu ve věcech technických a jiným osobám zúčastněným na provádění Díla veškeré potřebné doklady, konzultace, pomoc a jinou součinnost.
- Zhotovitel 4. se zavazuje zajistit pro 4. modifikovaného Objednatele registraci experimentálního letadla v České republice. Nedohodnou-li se Smluvní strany jinak, je registraci modifikovaného pro experimentálního letadla v České republice stanoven nejpozději k předání modifikovaného experimentálního letadla dle čl. VI. Odst. 3 až 5 této Smlouvy.
- The Contractor undertakes, depending on the facts arising in the course of executing his obligations hereunder, to propose and implement any and all measures to comply with the conditions laid down hereby, to protect the Client against damage, loss and unnecessary expenditure and to provide the Client or the Client's representatives acting in technical matters and other persons participating in the implementation of the Work, with all necessary documentation, consultations, help and other assistance.
  - The Contractor undertakes to arrange for the Client the registration of the Modified Aircraft in the Czech Republic and with respect to the transfer of ownership rights. Unless the Parties agree otherwise, the deadline for the registration of the Modified Aircraft in the Czech Republic shall correspond with the date of transfer of the ownership rights to Modified Aircraft according to Article VI Sec. 3 -5.

#### XVII. ODPOVĚDNOST, SANKCE

#### V případě, že se Zhotovitel dostane do 1. prodlení s plněním a nedodrží milník Prvního letu v České republice (First Flight in Czech Republic - 01. 09. 2018)nebo milník modifikovaného Doručení Objednateli (Modified Aircraft delivery to the buyer - July 1, 2019 or ten (10) working days after the completion of initial 180 flight hours testing operations whichever occurs sooner)oba stanovené v Harmonogramu dle čl. VII. této Smlouvy, bude povinen Objednateli uhradit smluvní pokutu ve výši 0,5% Ceny za Dílo za každý byť započatý týden prodlení. Celková smluvní pokuta však nesmí přesáhnout 5 % Díla. Pro vyloučení jakýchkoli pochybností Smluvní strany sjednávají, že v případě současného prodlení Zhotovitele s více milníky se částky smluvních pokut za

#### **XVII. LIABILITY, SANCTIONS**

In the event that the Contractor is in delay with execution and fails to reach the first milestone - First Flight in Czech Republic -1 September 2018 – or the second milestone (Modified Aircraft delivery to the buyer - July 1, 2019 or ten (10) working days after the completion of the initial 180 flight hours testing operations whichever occurs sooner) as stipulated in the Schedule according to Art VIII hereof, then the Contractor shall be obliged to pay to the Client a contractual penalty in the amount of 0.5% from the Price for each day of the delay. The total amount of the penalty shall be capped at 5% of the Price For the sake of avoidance of any doubt, the Parties have agreed that in the event of a simultaneous default on the part of the Contractor with several milestones, the

1.





prodlení s plněním jednotlivých milníků sčítají.

contractual penalties imposed hereunder shall add up.

- 2. Pro vyloučení jakýchkoli pochybností Smluvní strany sjednávají, že prodlení Zhotovitele nenastane, pokud je způsobeno výhradně prodlením s úhradou Ceny Díla nebo jakékoliv její části či opožděným předložením technických dat nebo opožděnou dodávkou motoru ze strany Objednatele.
- 2. For the sake of avoidance of any doubt, the Contractual Parties have agreed that the Contractor shall not be in default if the delay was caused exclusively by late payment of any part of the Price or late provision of technical data or delayed supply of the Engine on the part of the Client.
- 3. V případě prodlení Objednatele s úhradou 3. Ceny Díla nebo jakékoliv její části se Objednatel zavazuje zhotoviteli uhradit úrok z prodlení v zákonné výši.
- 3. In case of delay with the payment of the Price for the Work or any part thereof the Client undertakes to pay to the Contractor an interest at the statutory rate.
- Objednatel je oprávněn kdykoliv provést 4. zápočet své pohledávky na úhradu smluvní pokuty dle tohoto článku Smlouvy proti jakýmkoli pohledávkám Zhotovitele na uhrazení jakékoli části Ceny Díla.
  - 4. The Client shall be entitled to set off any receivables he may have at any time on the basis of his right to claim contractual penalty hereunder, against any of the Contractor's receivables arising from his right to claim the Price for the Work hereunder.
- 5. Smluvní strany vylučují použití ust. § 2050 OZ s tím, že Objednatel má vedle smluvní pokuty dle tohoto článku Smlouvy nárok na náhradu škody.
- 5. The Contractual Parties exclude application of Section 2050 CC, i.e. the Client shall be entitled to seek damages in addition to the contractual penalty hereunder.
- 6. Poruší-li Smluvní strana povinnost z této 6. Smlouvy či může-li a má-li o takovém porušení vědět, oznámí to bez zbytečného odkladu druhé Smluvní straně, které z toho může vzniknout újma, a upozorní ji na možné následky; v takovém případě nemá poškozená Smluvní strana právo na náhradu té újmy, které mohla po oznámení zabránit.
- If either Party breaches its duty arising from this Contract or it should or could know about such a breach, it shall inform the other Party, which may incur damage, without undue delay and warn it of potential consequences; in such a case, the Party suffering damage has no right to be compensated for damage which it could avoid after being notified hereunder.
- Povinnost obou Smluvních stran k náhradě 7. škody vůči druhé Smluvní straně je omezena výší 1,5 násobku Ceny Díla.
- Liability of both Contracting parties for damages to the other Contracting party shall be limited to 1.5 multiple of the Price.





#### XVIII. POJIŠTĚNÍ

#### Zhotovitel prohlašuje, že má uzavřenou pojistnou smlouvu, jejímž předmětem je pojištění odpovědnosti za škodu způsobenou třetí osobě, a to zejména s ohledem na specifický rozsah plnění poskytovaného v rámci této Smlouvy, a že pojistná částka předmětného pojištění je alespoň ve výši Ceny Díla.

Zhotovitel se dále zavazuje řádně a včas plnit veškeré závazky z této pojistné smlouvy pro něj plynoucí a udržovat platné pojištění dle předchozího odstavce po celou dobu provádění Díla. Objednatel je oprávněn si kdykoliv v průběhu trvání této Smlouvy vyžádat předložení kopie pojistné smlouvy k ověření pojistného krytí, Zhotovitel je povinen v takovém případě požadavku Objednatele vyhovět do 7 (slovy: sedmi) kalendářních dnů.

#### **XVIII. INSURANCE**

- 1. The Contractor declares that he has concluded an insurance policy covering liability for damage caused to third parties, particularly with regard to the specific scope of services / work provided hereunder, and that this policy equals at least the amount of the Price hereunder.
- 2. The Contractor further undertakes to properly and timely perform all obligations under the insurance policy and to maintain valid insurance cover according to the previous paragraph for the entire duration of the execution of the Work. The Client shall be entitled to request submission of the copy of an insurance policy to verify the range of insurance coverage. The Contractor shall be required to meet such requirement within at latest 7 (seven) calendar days.

### XIX. BEZPEČNOST A OCHRANA ZDRAVÍ PŘI XIX. HEALTH AND SAFETY PRÁCI

- 1. Zhotovitel je povinen zajistit při provádění Díla dodržení veškerých bezpečnostních, hygienických a ekologických opatření a opatření vedoucích k požární ochraně při provádění Díla, a to v rozsahu a způsobem stanoveným příslušnými předpisy. Po dobu přítomnosti na místě, kde budou prováděny modifikace, musí zástupci Objednatele dodržovat veškeré místní zdravotní a bezpečnostní předpisy a účastnit se všech povinných bezpečnostních školení podle pokynů Zhotovitele.
- Zhotovitel v plném rozsahu odpovídá za 2. bezpečnost a ochranu zdraví všech osob, které se s jeho vědomím realizace Díla účastní.
- 1. The Contractor shall be obliged to ensure during execution of the Work compliance with all safety, sanitary and environmental measures as well as measures relating to fire protection during the execution of the Work, in the extent and manner prescribed by relevant regulation. While present at the site where the Modifications will be implemented, Client's representatives shall comply with all on-site health and safety regulations and shall participate in all mandatory safety trainings as per the instructions of the Contractor.
  - . The Contractor shall be fully responsible for the health and safety of all persons who are involved with his knowledge in execution of the Work.





- Zhotovitel je povinen provádět v průběhu provádění Díla vlastní dozor a soustavnou kontrolu nad bezpečností práce a požární ochranou.
- 4. Dojde-li k jakémukoliv úrazu při provádění 4. Díla nebo při činnostech souvisejících s prováděním Díla, je Zhotovitel povinen zabezpečit vyšetření úrazu a sepsání příslušného záznamu. Objednatel je povinen poskytnout Zhotoviteli nezbytnou součinnost.
- The Contractor shall perform its own supervision and continuous control of work safety and fire protection regulation during execution of the Work.
- 4. Should there occur any injury during execution of the Work or during activities related to the execution of the Work, the Contractor shall ensure that any such accident is properly investigated and protocoled. The Client shall be obliged to provide the Contractor with all necessary cooperation.

#### XX. UKONČENÍ SMLOUVY, VYŠŠÍ MOC:

- Tuto Smlouvu lze ukončit splněním, dohodou Smluvních stran nebo odstoupením od Smlouvy z důvodů stanovených v zákoně nebo v této Smlouvě.
- Objednatel je oprávněn od Smlouvy odstoupit bez jakýchkoli sankcí, nastane-li některá z níže uvedených skutečností:
  - a) výdaje nebo část výdajů, které na základě této Smlouvy vzniknou, označí Poskytovatel dotace, případně jiný kontrolní subjekt, za nezpůsobilé;
  - b) Objednateli bude odňata finanční dotace k realizaci Projektu;
  - c) Zhotovitel pozbude veřejnoprávní oprávnění k výkonu činností, k nimž se touto Smlouvou zavázal; Zhotovitel je povinen neprodleně oznámit Objednateli i pouhý fakt, že je proti němu vedeno správní řízení o odebrání oprávnění k výkonu činnosti podle této Smlouvy;
  - d) Zhotovitel vstoupí do likvidace;

#### XX. TERMINATION, VIS MAJOR:

- This Contract may be terminated by its fulfilment / completion, by agreement of the Parties or by withdrawal from the Contract for reasons specified in law or in this Contract.
- 2. The Client shall be entitled to withdraw from the Contract without sanction should any of the below specified events occur:
  - a) any expenditure or any part thereof, which may arise on basis of this Contract, are declared by the subsidy provider or other controlling body to be ineligible, or
  - the Client's financial support (aid) provided toward implementation of the Projects is withdrawn;
  - c) The Contractor loses the license to execute activities, which constitute the subject-matter hereof; the Contractor shall be obliged to inform the Client without delay about the mere fact that he may be subject to proceedings leading to potential withdrawal of his authorization to perform activities hereunder;
  - d) The Contractor enters liquidation;





- e) vůči majetku Zhotovitele probíhá insolvenční řízení (nebo obdobné řízení dle právních předpisů jiného státu), v němž bylo vydáno rozhodnutí o úpadku, nebo byl insolvenční návrh zamítnut proto, že majetek nepostačuje k úhradě nákladů insolvenčního řízení, nebo byl konkurs zrušen proto, že majetek byl zcela nepostačující nebo byla zavedena nucená správa podle zvláštních právních předpisů;
- f) jakýkoliv z výstupních dokumentů či zpráv předkládaný Zhotovitelem Objednateli dle této Smlouvy nesplňuje technické či jiné parametry předvídané touto Smlouvou či jejími přílohami ani poté, kdy Objednatel vyzval dvakrát Zhotovitele k jejich splnění resp. doplnění;
- g) je s přihlédnutím ke všem okolnostem zřejmé, že činnost Zhotovitele nevede z důvodů, které leží na jeho straně, k naplnění podstatné části cílů této Smlouvy;
- h) pokud bude Zhotoviteli vyměřena maximální výše smluvní pokuty dle čl. XVII. odst. 1 této Smlouvy;
- i) vyjde-li najevo, že Zhotovitel uvedl v Nabídce informace nebo doklady, které neodpovídají skutečnosti a které měly nebo mohly mít vliv na výsledek výběrového řízení, které vedlo k uzavření této Smlouvy (§ 223 odst. 2 písm. c) ZZVZ)

- e) insolvency proceedings were commenced against the assets of the Contractor (or similar proceedings under the laws of another country), where a decision on bankruptcy was issued, or insolvency petition rejected because of insufficient assets to cover the costs of insolvency proceedings, or where bankruptcy was cancelled because property was completely insufficient or receivership was introduced by special legislation;
- f) any of the documents or reports submitted by the Contractor to the Client hereunder does not comply with technical or other parameters foreseen by this Contract or Annexes even after the Client has twice notified the Contractor to fulfil these, respectively to observe / comply with these in additional time;
- g) it has become obvious, considering all pertinent facts and circumstances, that the Contractor's activities do no lead, to the fulfilment of a material part of objectives defined herein due to reasons on the part of the Contractor;
- h) if the contractual penalty potentially claimed against the Contractor will have reached its maximum limit according to Art. XVII. Para 1 hereof.
- i) it is revealed that the Contractor stated in the bid certain information or submitted documents which do not correspond to reality and which had or could have had impact on the results of the Tender that lead to the conclusion hereof (Section 223 para 2 letter c) PPA);





- j) v případě přenechání/převodu/přechodu práv a povinností Zhotovitele z této Smlouvy na třetí osobu bez písemného souhlasu Objednatele;
- k) Zhotovitel poruší tuto smlouvu hrubým způsobem.
- 3. Za hrubé porušení této Smlouvy Zhotovitelem bude považováno:
  - a) porušení povinností vyplývajících z právních předpisů či ujednání Smluvních stran v souvislosti se zpracováním osobních údajů, pokud předmětné údaje nebyly zhotovitelem zveřejněny v dobré víře;
  - b) Zhotovitel při realizaci Díla trvale nebo opakovaně (soustavně) porušuje právní předpisy, regulace, technické standardy a normy České republiky či jiných států, k jejichž dodržování se touto Smlouvou zavázal;
  - c) porušení této Smlouvy ze strany Zhotovitele takovým způsobem, že v jeho důsledku nemůže Objednatel dostát cílům, pro které Smlouvu sjednal, nebo jestliže v důsledku takového jednání Zhotovitele vznikne Objednateli značná škoda;
  - d) porušení povinností Zhotovitele spojených s poskytnutím bankovní záruky uvedených v článku XII. této Smlouvy;
  - e) porušení povinnosti Zhotovitele mít sjednané pojištění podle článku XVIII. této Smlouvy.

- j) in the event that the Contractor yields, transfers or assigns its rights and obligations hereunder to a third party without prior consent in writing from the Client;
- k) The contractor breaches this Contract in another material instance.
- The following shall be considered to constitute a material breach hereof by the Contractor:
  - a) breach of duties imposed by law or agreed by the Parties herein in relation to the processing of personal data, unless the subject data were disclosed by Contractor in good faith;
  - b) The Contractor violates, during execution of the Works, continuously or repeatedly (continuous) laws, regulations, technical standards and norms of the Czech Republic or other countries, which he agreed to observe herein;
  - c) the Contractor breaches this Contract in such a manner that the Client will not be able to meet his objectives for which he concluded this Contract, or if such conduct on the part of the Contractor causes considerable damage to the Client;
  - d) the Contractor breaches his obligations associated with provision of the bank guarantee under Article XII. hereof;
  - e) the Contractor breaches his duty to arrange insurance policy under Article XVIII. hereof.





- V případě ukončení Smlouvy z důvodů uvedených v odst. 2 tohoto článku Smlouvy vzniká Zhotoviteli nárok na odměnu za skutečně provedenou část Díla pro Objednatele, odpovídá-li podmínkám Smlouvy.
- 5. V případě ukončení této Smlouvy Objednatelem z jiných důvodů než z důvodu porušení povinností Zhotovitelem, má Zhotovitel nárok na uhrazení nákladů, které mu v souvislosti s plněním povinností z této Smlouvy vznikly před ukončením Smlouvy ze strany Objednatele, pokud prokazatelně nemohly být včas zrušeny a nejsou-li takové náklady Zhotovitele pokryty z jiných zdrojů.
- 6. Účinky odstoupení od Smlouvy nastávají 6. dnem doručení písemného oznámení jedné Smluvní strany o odstoupení od Smlouvy druhé Smluvní straně s účinky zániku Smlouvy "ex nunc". Zhotovitel vydá Objednateli tu část Díla, která již byla uhrazena.
- Za okolnost vylučující odpovědnost se považuje překážka, jež nastala nezávisle na vůli povinné Smluvní strany a brání jí ve splnění její povinnosti, jestliže nelze rozumně předpokládat, že by povinná Smluvní strana tuto překážku nebo její následky odvrátila nebo překonala, a dále, že by v době vzniku závazku tuto překážku předvídala (dále jen "Vyšší Odpovědnost nevylučuje překážka, která vznikla teprve v době, kdy povinná Smluvní strana byla v prodlení s plněním své povinnosti, nebo vznikla Z jejích hospodářských poměrů. Účinky vylučující odpovědnost jsou omezeny pouze na dobu, dokud trvá překážka, s níž jsou tyto účinky spojeny.

- In case the Contract's termination due to reasons given in Section 2 of this Article, the Contractor shall be eligible for payment for the actually executed part of the Work for the Client, if such had been executed in accordance with the terms and conditions hereof.
- 5. In the event of termination of this Contract by the Client for other reasons than for the reasons of a breach of obligations on the part of the Contractor, the Contractor shall have the right to payment of costs which he accrued in connection with the fulfilment of his obligations hereunder prior to the Contract termination by the Client, which could demonstrably not be cancelled in time and if such costs accrued by the Contractor are not covered from other sources.
- 6. The act of withdrawal from the Contract shall become effective on the day of delivery of the notification in writing from one Party to the other with consequences of the Contract termination effective in the "ex nunc" regime.
  - Circumstances precluding liability shall be deemed to have been constituted by such obstacle(s) which arose independently of the will of the obliged Party, and which prevent fulfilment of that Party's obligation, provided that it could not be reasonably expected that the obliged Party could overcome or avert this obstacle or its consequences, and furthermore that such Party could foresee such obstacle when it entered into the respective covenants (hereinafter "Vis major"). Liability cannot be precluded by obstacles that arose only after the obliged Party was in default with fulfilment of its obligations, or which arose in connection with its economic situation. The effects precluding liability shall be limited to the period during which the obstacles causing these effects persist.

7.





- 8. Nastane-li situace, kterou Smluvní strana považuje za případ Vyšší moci a která může ovlivnit plnění jejích závazků, neprodleně vyrozumí druhou Smluvní stranu a vynasnaží se pokračovat v plnění svých závazků, nakolik to bude přiměřeně možné. Současně taková Smluvní strana vyrozumí druhou Smluvní stranu o všech návrzích, včetně případných alternativních způsobů plnění, avšak bez souhlasu druhé Smluvní strany nepřistoupí k jejich plnění.
- Should a situation occur, which the Party could reasonably consider to constitute Vis major, and which could affect fulfilment of its obligations hereunder, such Party shall immediately notify the other Party and shall attempt to continue in its performance hereunder in a reasonable degree. Simultaneously, such Party shall inform the other of any proposals, including alternative modes of performance; however, without consent of the other Party, it shall not effect such proceed to alternative performance.
- 9. Nastane-li případ Vyšší moci, budou termíny stanovené Smlouvou prodlouženy o dobu odpovídající době trvání případu Vyšší moci.
- If a situation constituting Vis major occurs, the deadlines imposed hereunder shall be extended by the period of the duration of the said Vis major event.

# XXI. ZÁSTUPCI, OZNAMOVÁNÍ:

#### XXI. REPRESENTATIVES, NOTICES:

 Zhotovitel zmocnil tyto zástupce odpovědné za řízení realizace Díla dle Smlouvy a komunikaci s Objednatelem: The Contractor has appointed the following representatives responsible for the management and performance of the Work hereunder and communication with the Client:

Ve věcech technických: In technical matters: E-mail: E-mail:

Ve věcech smluvních:In contractual matters:E-mail:E-mail:

- 2. Objednatel zmocnil tyto zástupce odpovědné za komunikaci se Zhotovitelem při realizaci Díla dle této Smlouvy:
- 2. The Client has appointed the following representatives responsible for communication with the Contractor for the purposes of realization of the Work:

Ve věcech technických:
Tel:
Email:
In technical matters:
Tel:
Email:





Ve věcech smluvních:

Tel: Email: In contractual matters:

Tel: Email:

- Veškerá oznámení učiněná mezi Smluvními stranami podle této Smlouvy musí být vyhotovena písemně a doručena druhé Smluvní straně oprávněnou zasilatelskou službou, osobně (s písemným potvrzením o převzetí), doporučenou zásilkou odeslanou s využitím provozovatele poštovních služeb nebo mohou být učiněna formou elektronické komunikace s elektronickým podpisem na adresu v případě Objednatele a Rolf v případě Zhotovitele.
- 3. Any and all notices transmitted between the Parties hereunder must be made in writing and delivered to the other Party by an authorized delivery service, delivered in person (with a written confirmation of receipt), by a registered letter sent by post or in the form of electronic communication carrying electronic signature sent to

for the Client and to for the Contractor.

- 4. Ve věcech odborných nebo technických 4. (jednání o předběžném posouzení Díla, uplatnění záruky apod.) je přípustná elektronická komunikace prostřednictvím zástupců ve věcech technických na emailové adresy uvedené v odst. 2. tohoto článku.
- 4. In expert or technical matters (matters related to preliminary assessment of the Work, Warranty Claims etc.) electronic communication will be acceptable between the appointed representatives for technical matters to e-mail addresses as provided in Section 2 here above.
- 5. Pokud bude při realizaci této Smlouvy docházet ke zpracování osobních údajů ve smyslu zákona č. 101/2000 Sb., o ochraně osobních údajů, v platném znění, je Zhotovitel povinen dodržovat všechny povinnosti vyplývající z tohoto zákona a v případě, že je třeba souhlasu subjektu údajů, zajistit tento souhlas tak, aby bylo možné osobní údaje předat Objednateli. Pro vyloučení pochybností se uvádí, že porušení právních předpisů či ujednání Smluvních stran v souvislosti s nakládáním s osobními údaji Zhotovitelem bude považováno za hrubé porušení této Smlouvy.
- 5. If personal data are processed during the execution hereof within the meaning of Act No. 101/2000 Coll., On Personal Data Protection, as amended, the Contractor shall comply with all obligations arising from this Act and if it is necessary to seek consent from subjects to such data processing, the Contractor shall secure such consent so that it is possible to transmit any collected personal information to the Client. For the avoidance of doubt, any breach of legal obligations or agreement between the Parties hereto in relation to the processing of personal data on the part of the Contractor shall be considered to constitute a serious breach hereof.





# XXII. ROZHODNÉ PRÁVO A SPORY:

- Tato Smlouva a veškeré právní vztahy z ní vzniklé se řídí výlučně právním řádem České republiky. Pro právní jistotu Smluvní strany vylučují dopad Vídeňské úmluvy OSN o smlouvách o mezinárodní koupi zboží z 11. 4. 1980.
- Smluvní strany berou na vědomí a uznávají, že v oblastech výslovně neupravených touto Smlouvou platí ustanovení OZ.
- 3. Veškeré spory vzniklé z této Smlouvy či z právních vztahů s ní souvisejících, včetně sporů týkajících se platnosti smlouvy a následků její neplatnosti, budou Smluvní strany řešit jednáním. V případě, že nebude možné takový spor urovnat jednáním ve lhůtě šedesáti (60) dnů, bude jej rozhodovat věcně příslušný soud v České republice místně příslušný dle sídla Objednatele. Tato příslušnost je výlučná.

#### XIII. INTERPRETAČNÍ PRAVIDLA

Tato Smlouva a všechny její přílohy tvoří jediný celek a jednotlivá práva a povinnosti musí být vykládána vždy v souladu s těmito dokumenty. Platí následující výkladová přednost jednotlivých dokumentů: Technická specifikace má přednost před zněním této Smlouvy a tato Smlouva má přednost před zněním Zadávací dokumentace.

#### XXII. GOVERNING LAW, DISPUTES:

- 1. This Contract and any and all legal relations arising here from shall be governed exclusively by the laws and regulations of the Czech Republic. To ensure legal certainty, the Parties exclude application of the United Nations Convention on Contracts for the International Sale of Goods (Vienna, 1980).
- 2. The Parties acknowledge and recognize that areas not explicitly regulated hereby shall be regulated by the respective provisions of the Czech Civil Code.
- Any and all disputes arising in connection 3. herewith, including any disputes relating to the validity hereof and consequences of any potential invalid provisions, shall resolved by the **Parties** negotiations. In cases where a dispute be resolved amicably cannot negotiation within 60 (sixty) days, such a dispute shall be decided upon a motion of one of the Parties by a competent court in the Czech Republic. The jurisdiction of the Czech courts shall be exclusive.

#### **XIII. INTERPRETATION RULES**

This Contact shall be considered for the comprehensive unit and obligations and rights shall be always interpreted in accordance with these documents. The order of precedence between individual contractual documents shall be set as follows: Technical Specifications shall take precedence over the wording of this Contract and the Contract shall take precedence over the wording of the Documentation.





# XXIV. ZÁVĚREČNÁ A JINÁ UJEDNÁNÍ:

# XXIV. CONCLUDING AND OTHER COVENANTS:

- Smlouva představuje úplnou a ucelenou dohodu mezi Objednatelem a Zhotovitelem.
- Pokud se jakékoliv ustanovení této Smlouvy později ukáže nebo bude určeno jako neplatné, neúčinné, zdánlivé nebo nevynutitelné, pak taková neplatnost, neúčinnost, zdánlivost nebo nevynutitelnost nezpůsobuje neplatnost, zdánlivost neúčinnost, nevynutitelnost Smlouvy jako celku. V takovém případě se Strany zavazují bez zbytečného prodlení dodatečně takové vadné ustanovení vyjasnit ve smyslu ustanovení § 553 odst. 2 OZ nebo jej nahradit po vzájemné dohodě novým ustanovením, jež nejblíže, v rozsahu povoleném právními předpisy České republiky, odpovídá úmyslu Smluvních stran v době uzavření této Smlouvy.
- Tato Smlouva nabývá platnosti a účinnosti dnem jejího podpisu oprávněnými osobami obou Smluvních stran.
- Smluvní strany souhlasí s tím, že tato smlouva bude uveřejněna způsobem stanoveným v zák. č. 340/2015 Sb. a v zák. č. 134/2016 Sb.
- 5. Tuto Smlouvu lze doplnit nebo měnit výlučně formou písemných očíslovaných dodatků, opatřených časovým a místním určením a podepsaných oprávněnými zástupci Smluvních stran. Smluvní strany ve smyslu ustanovení § 564 OZ výslovně vylučují provedení změn Smlouvy jiným způsobem v jiné formě.

- This Contract represents a complete agreement between the Client and the Contractor.
- Should any of the provisions hereof 2. appear or shall be determined invalid, ineffective. non-existent unenforceable at a later date, then such invalidity, ineffectiveness, non-existence or unenforceability shall not cause the invalidity, ineffectiveness, non-existence or unenforceability hereof as a whole. In such a case, the Parties undertake, to clarify without undue delay any such defective provisions hereinwithin the meaning of Section 553 (2) CC, or to replace it, by mutual agreement, by a new provision that most closely reflects the intentions of the Parties at the time of conclusion hereof, to an extent permitted by the laws and regulations of the Czech Republic.
- 3. This Framework Contract becomes valid and comes into force on the date of its signature by the authorized representatives of both Parties.
- 4. The Parties agree on publishing of this Contract according to Act No. 340/2015 Coll. and Act No. 134/2016 Coll.
- 5. This Contract may be amended or modified exclusively in the form of written and numbered amendments specifying the time and place thereof, and signed by the authorized representatives of the Parties.IN accordance with Section 564 CC, the Parties explicitly exclude amendments hereto in any other manner or form.





- 6. Tato Smlouva je sepsána v českém a anglickém jazyce ve čtyřech (4) vyhotoveních, z nichž každé vyhotovení má platnost originálu. Každá ze Smluvních stran obdrží po dvou (2) vyhotoveních. V případě sporu má české znění Smlouvy přednost před anglickým zněním.
- Nedílnou součástí Smlouvy jsou tyto přílohy:

Příloha č. 1: Technická specifikace Příloha č. 2:Nabídka Zhotovitele podaná v Zadávacím řízení (pouze technická část) Příloha č. 3: Zadávací dokumentace Příloha č. 4:Podrobný rozpis Ceny Díla (Quotation Template)

8. Smluvní strany stvrzují Smlouvu podpisem na důkaz souhlasu s celým jejím obsahem.

and English languages in four (4) counterparts, each having the force of original. Each Party shall receive two (2) counterparts. In case of any dispute, the Czech language version hereof shall be the governing version.

This Contract was made out in the Czech

7. The Annexes listed below form an integral part hereof:

Annex 1: Technical Specification
Annex2:The Contractor's Bid submitted
within the Tender (technical part only)
Annex 3: Tender Documentation
Annex 4: Detailed breakdown of the
Price for the Work (Quotation Template)

8. By attaching their signature hereto the Parties express their consent with the content hereof in its entirety.

V Praze/ In Prague dne/on 2017	In Prague on September 27 <sup>th</sup> , 2017
On behalf of: České vysoké učení technické v Praze	On behalf of: Beechcraft Berlin Aviation GmbH
Name:prof. Ing. Michael Valášek, DrSc. Function: děkan Fakulty strojní	Name: Rolf Kaeselau Function: Managing Director





# **Technical specification**

Flying test bed – Round 2





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#### 1. Executive Summary

CVUT is seeking to develop knowledge and skills by conducting research in the area of modern turboprop aircraft engines and innovative materials. As part of its research project, CVUT will be conducting testing of its research hypotheses, including flight testing, to validate technologies. This RFP is seeking the following scope:

- a) Selection and Procurement of an aircraft capable of achieving test objectives of a test turboprop engine, with necessary aircraft modifications
- b) Design of a modification of an aircraft to interface with a test turboprop engine, including accommodating instrumentation requirements.
- c) Execution of physical modification of a flying test bed platform to replace one existing engine with a different model, instrumented turboprop engine
- d) Design, procurement, and installation of a data acquisition system
- e) Obtain EASA permit to fly for the modified aircraft with the test engine in Czech Republic. The aircraft shall be registered in the Czech Republic.
- f) Installation of the Contracting authority supplied instrumented test engine, and connection of instrumentation leads
- g) Flight test operations of up to 180flight test hours in the Czech Republic between Sept 1, 2018 and June 30, 2019.
- h) Line level maintenance as necessary and as defined by the corresponding manuals for aircraft, aircraft avionics, legacy propeller and legacy engine till June 30, 2019

#### 2. Abbreviations:

ARINC 429: Avionics data bus communication technical standard

AWG: American Wire Gage CAA: Civil Aviation Authority

CAMO: Continuing Airworthiness Management Organization

CAS: Cabin Alert System

CVUT: Czech Technical University (Contracting authority)

DAS: Data Acquisition System

Dewetron: Industrial standard for data acquisition systems

EASA: European Aviation Safety Agency

EGT: Exhaust Gas Temperature FOD: Foreign Object Damage

FTB: Flying Test Bed FTS: FADEC Test System GCU: Generator Control Unit ICD: Interface Control Document IFR: Instrument Flight Rules KIAS: Knots indicated airspeed KCAS: Knots calibrated airspeed

KTAS: Knots true airspeed PLA: Power Level Angle

OEM: Original Equipment Manufacturer

#### 3. Flying Test Bed Work scope Details





The terms "Vendor" and "Supplier" as used in this specification shall refer to the company named in the contract for the work described in this specification. The words "shall" and "will" are to be understood as mandatory. The word "should" is to be understood as advisory. All work listed in this specification shall be performed by the Vendor unless specifically stated otherwise.

The proposal must comply with all shall statements listed throughout this section in order to meet the minimum technical requirements.

#### 3.1. Aircraft Selection & Procurement

The Supplier shall select and procure an aircraft platform that will satisfy the following characteristics:

- 1. A turboprop aircraft with 2 or more gas turbine engines in tractor configuration
- 2. Capable of flight of at least 25,000 ft with a pressurized cabin, preferably capable of over 30,000 ft
- 3. Shall be capable of a min controlled speed of not more than 100 KIAS.
- 4. Shall be capable of a cruise speed of at least 250 KTAS at 25,000 ft altitude.
- 5. Capable of level flight with one engine inoperative at 15,000 feet pressure altitude on an ISA day
- 6. Capable of accommodating a test engine propeller diameter of 105 inches
- 7. After appropriate aircraft structural modifications as needed, the aircraft shall be capable of accommodating a test engine in the power range of 900 to 1300 shaft horsepower.
- 8. An aircraft type that already operates within the EU on the civil register.
- 9. An aircraft shall have a remaining useful life of at least 6000 cycles and 3000 flight hours with all maintenance requirements being completed by EASA or FAA approved Maintenance Organizations (i.a.w. EASA Part 145 or FAR 145 regulation) or by Aircraft OEM approved Maintenance Organizations or by Maintenance organizations regulated by local CAA recognized by EASA or FAA, with an approved capability list covering the airframe and all its components.
- 10. Selected aircraft shall have all its components such as engines, propellers, avionics serviced and maintained by EASA or FAA approved Maintenance Organizations (i.a.w. EASA Part 145 or FAR 145 regulation) or by OEM approved Maintenance Organizations or by Maintenance organizations regulated by local CAA recognized by EASA or FAA, with an approved capability list covering the airframe and all its components, and all of its components shall not require any removal for scheduled maintenance or overhaul for two (2) years after the modified aircraft delivery to the CVUT.
- 11. Selected aircraft's engines and propellers shall have a remaining useful life of at least 6000 cycles and 3000 flight hours, with all maintenance requirements being completed by EASA or FAA approved Maintenance Organizations only (i.a.w. EASA Part 145 or FAR 145 regulation) or by OEM approved Maintenance Organizations or by Maintenance organizations regulated by local CAA recognized by EASA or FAA, with an approved capability list covering the airframe and all its components. The remaining engine or propeller flight hours at the moment of modified aircraft delivery to the CVUT for the flight testing in Czech Republic should be at least 1200 hours for each legacy engine or each propeller until the next required engine overhaul and/or Hot Section Inspection.
- 12. The year of selected aircraft production shall not be older than year 1995.
- 13. Selected aircraft shall interface with the engine via a single mount plane
- 14. Selected aircraft shall be PART23 or CS23 certified or equivalent EU regulatory approval. It is a Supplier responsibility to ensure that the selected aircraft can sustain the loads of test engine as highlighted in section 3.2.2 below
- 15. Selected aircraft shall have an avionics package based on analogue gauges.





- 16. Selected aircraft shall be subject to A-check inspection and have any findings repaired/corrected in order to meet airworthiness requirements and required lives as defined above. Any corrosion shall be treated. Engines shall be subject to borescope inspection.
- 17. Existing paint shall be stripped and aircraft shall have new white paint applied to the entire aircraft unless the selected aircraft has been repainted and stripped not longer than two (2) years ago.
- 18. Interior, including but not limited to seats, walls and carpet, of the selected aircraft shall be free of visible damage, any odor and stains, and shall be in clean conditions.
- 19. The avionics architecture shall be capable of being modified to interface with an ARINC 429 databus to allow connection with expected Data Acquisition Unit, and test engine.
- 20. Aircraft shall have the necessary avionics package as required for unrestricted operation within the EU.
- 21. Selected aircraft shall be capable of IFR flights
- 22. The selected aircraft shall accommodate a payload of at least 1500 lbm<sup>1</sup> in order to accommodate 2 research engineers plus 2 flight test engineers in flight in addition to the required data acquisition units.
- 23. The selected aircraft cabin configuration shall include a toilet and at least4 seats to accommodate at least 2 research engineers plus at least 2 flight test engineers.

# 3.2. Engine-Aircraft integration Engineering

The Supplier shall design and justify the modifications of the aircraft as necessary to accommodate an alternative turboprop engine, as detailed in the following paragraphs.

The specific subjects that need to be addressed include but are not limited to the subject areas described in the following paragraphs. For each of the technical integration areas described in the below paragraphs, the CVUT will provide interface control documents to describe the interface requirements of the test engine. It is expected that the Supplier will design and implement the aircraft modifications as necessary to interface with the test engine. The CVUT anticipates that some negotiation of interface requirements to efficiently integrate with the selected aircraft may be appropriate. An integration engineering effort on the part of the Supplier should be planned until final agreement with the Supplier and CVUT on interface control documents.

For an aircraft type that meets the requirements of section 3.1, the CVUT can make available to the Supplier the following information from the OEM for use on this project consistent with an appropriate proprietary information agreement:

- Pilot operation handbook, which will include baseline performance numbers (takeoff and landing speeds) for use in calculation of modified performance characteristics for the modified experimental aircraft
- Maintenance manuals
- Airframe Wiring schematic
- Illustrated parts catalog for the wing
- Pylon torque and thrust capabilities for the production configuration
- Strength and life certification report for the wing and pylon for the production configuration
- List of airframe control inputs needed from the engine, and available control parameters from the airframe for use by the engine
- Temperature limitations for fuel return from the engine to the airframe.

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<sup>&</sup>lt;sup>1</sup> pounds mass (lb) in imperial units





# 3.2.1. Test Propulsion System Details

Basic characteristics of test engine models are will be as follows:

Category	Sub-category	Unit	Reference engine
Engine Weight	Dry	Lbm	445 - 775
Engine Weight	Wet	Lbm	460 – 870
Engine Diameter		inch	15 – 23
Engine Length (without accessories)		inch	50 – 71
Propeller flange distance from engine mount plane		inch	33 – 46
Engine C.G. Locations - installed accessories, no	forward from mount		
propeller	plane	inch	2,56 – 3,61
Engine Airflow		Lbm/sec	8,1 - 11,5
Rated Horsepower		SHP	900 – 1300
Propeller speed		rpm	1000 – 2000
Exhaust Gas Temperature		°F	980 – 1570
Engine Thrust (with propeller and exhaust)		lbf	2250 - 7870
Engine mounting	Qty of mounts	-	3 – 4
Max Torque		Lb.ft	1480 – 4500
Fuel Consumption	Take Off	Lb/h	500 - 800

It is necessary to consider that the engine mounting system (including truss structure) should be provided by Vendor based on mounting system drawings and applicable technical specifications. For reference only, a baseline engine picture regarding installation is shown below in Figure 1.

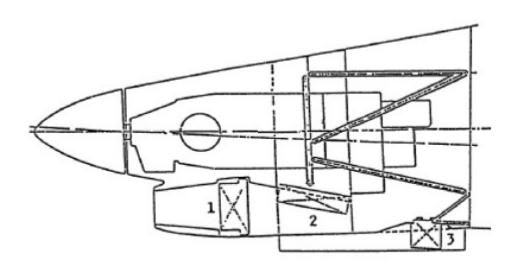


Figure 1 Reference Engine - Installation and Truss System - For Reference Only

Some basic characteristics of possible used propellers are as follows:





Characteristic	Unit	Value
Number of blades	-	3 - 5
Diameter	Inch	95 - 105
Dry, rotating prop weight	Lbs	145 – 235

# 3.2.2. Aircraft Structural Modification Design

It is anticipated that the alternative, test, engine described in 3.2.1could have an increase in weight, thrust, and shaft horsepower compared to the legacy turboprop engine installed in the selected test aircraft by the original aircraft manufacturer. The Supplier shall complete an appropriate analysis of the airframe structure with the test engine loads as necessary to achieve the permit to fly with the engine described in Section 3.2.1. The Supplier shall design any required modifications including modifications to the aircraft wing and pylon.

A new or modified aircraft mount truss, nacelle, and pylon for the test engine will be required; Supplier shall design and manufacture these components. The design, procurement, and installation of the modifications shall be the responsibility of the Supplier.

#### 3.2.3. Bleed Air Integration

Supplier shall define and design the airframe interface consistent with the interface control document. The CVUT will supply the interface requirements for the test engine. The test engine interface requirements will include air pressure, temperature, and mass flow. There is no requirement to integrate test engine bleed with the aircraft bleed system, as long as there is a provision to control test engine bleed levels during flight testing. (Accommodating an overboard bleed system is acceptable.) Incorporation of CVUT-furnished test aircraft bleed valves and associated hardware into the aircraft modification should be considered. CVUT will provide aircraft bleed valve hardware and control system designed to interfaces with test engine bleed system. Depending on FTB testing needs, the requirement for flow measurements and its accuracy will be applied per ICDs provided by CVUT.

#### 3.2.4. Fuel systems integration

Supplier shall define and design the fuel system airframe interface consistent with the interface control document. The CVUT will supply the interface requirements for the test engine. The interface control document will include the definition of test engine requirements related to fuel pressure, temperature, flow, and filter capability.

Aircraft modification design shall include installation of new flow meter with sufficient accuracy to measure fuel flow within 0.5% of the reading.

A fuel cooler may be required as part of the airframe interface configuration if the selected airframe requires flow from the engine at a lower temperature than would be provided by the test engine, and therefore should be considered by Supplier.

# 3.2.5. Electrical, controls integration

Supplier shall define and design the aircraft controls and aircraft electrical system interface consistent with the ICD. CVUT will supply the interface requirements for the test engine which will include FADEC interface requirements, electrical power requirements, starting electrical power requirements, sensor





requirements from the aircraft to the engine, and engine parameters available to the airframe from the engine.

Supplier shall create the definition of new electrical and control systems wiring, design of airframe routing of aircraft harnesses, and create the relevant design documentation. Supplier shall ensure installation of the Electronic box into the cabin (ensuring corresponding harnesses under its scope of procurement).

Supplier engineering effort shall include analysis/testing of modification effect to A/C systems, power requirements versus available generators/batteries, check of AWG on high-current lines (typically for S/G), check of GCUs.

The integration design effort of the Supplier should include new wiring in aircraft and flight deck interfaces, such as control lever pedestal incl. rotational sensor, switch panels and CAS (crew alert system) lights.

Supplier shall design and procure flight deck display as required to support permit to fly and flight testing. Flight deck display of test engine parameters should be carried out by GARMIN 950/1000 unit or equivalent. Integration of the entire system (screen unit plus converter modules) should include calibration of displays, with software changes as needed, to display key test engine parameters.

The airframe interface shall include the provision to interface with a CVUT-provided FTS. The FTS would be located in the cabin and will have the capability to simultaneously interface with the aircraft avionics and the FADEC in the test engine. FTS integration shall include power supply including converters (FTS requires "120VAC 400Hz, 3 phase to go to the UPS"). Capabilities of the FTS include making real-time minor changes to FADEC software to update control schedules and record high frequency FADEC parameter data. Use of the FTS system to update test engine control schedules will only be performed by a CVUT-supplied engineer.

A detailed ICD will be provided after the contract starts. Required inputs from the aircraft for the test engine FADEC include:

- Digital redundant signals, communicated via an ARINC 429 interface:
  - Ambient Temperature
  - Ambient Pressure
  - Airspeed
- Discrete signals:
  - o Weight on Wheels
  - Propeller Anti-Ice activation
  - FOD door deployment
- Analog input:
  - PLA position

A subset of available inputs from the FADEC for use by the aircraft includes:

- Torque
- Power
- Core speed
- Propeller shaft speed
- EGT
- Fuel Flow





- Oil Temperature
- Oil Pressure
- Fuel Filter delta pressure (discrete signal)
- Ready-to-Load for generators (discrete signal)
- Ready-to-Start (discrete signal)

#### 3.2.6. Inlet & exhaust

Supplier shall define and design the aircraft interface as needed to accommodate the engine inlet and engine exhaust system interface consistent with the ICD. CVUT will supply the inlet and exhaust interface requirements for the test engine which will include physical interface requirements for attaching the inlet as well as the exhaust stacks.

Supplier shall modify design and procure exhaust ducts to interface with test engine, which may be completed by way of modifying the existing legacy exhaust ducts, or design and procurement of an adapter, or design and procurement of new ducts. The Supplier's integration design effort shall include modification of nacelle cowl.

CVUT will supply a test aircraft inlet to be used with the test engine. The Supplier's integration design effort shall include modification of the nacelle. The Supplier's integration design effort shall also include if needed, and as approved in an ICD with the CVUT, modifications to the inlet to integrate with the selected aircraft platform.

The CVUT-provided inlet will include a FOD and ice separator. The Supplier shall ensure the electrical and controls interface enable deployment of the FOD doors. Planned flight testing includes deployment of the FOD doors to test the effects on aircraft and engine performance. The CVUT will validate the operation of the inlet system, including FOD and ice separator, via ground testing prior to flight testing.

#### 3.2.7. Bay cooling /thermal evaluation

The CVUT will provide in an ICD the maximum allowable temperature profile along the test engine and test engine accessories.

The Supplier shall define and design Nacelle modifications as needed to comply with the engine bay temperature requirements of both the engine and the airframe. ACOC integration and modifications needed shall include ejector considered to be powered by engine bleed air. The modifications should include design of air scoops and outlets. A preliminary thermal study will be provided by the CVUT by no later than 30 days from contract signature.

Substantiation of nacelle modifications by way of empirical sizing is acceptable, including validation via ground test soak back conditions, if timely adjustments by the Supplier will be possible.

Size and performance of air cooled oil cooler (ACOC) on test engine will be defined by CVUT. Nacelle modifications will likely need to include integration with smooth air intake and outlet. A preliminary study of ACOC performance will be provided by CVUT by no later than 30 days from contract signature.





# 3.2.8. Instrumentation Routing Design

The Supplier shall design a routing scheme to accommodate routing instrumentations wiring for up to 300 channels of instrumentation from the test engine bay to the data acquisition system. Instrumentation integration shall be carried out including inlet, ACOC and ejector, Bleed Air probes and sensors.

# 3.2.9. System Safety Assessment

The Supplier shall perform any required safety and reliability assessment for the modified aircraft as required to obtain the Permit to Fly.

The Supplier shall support the CVUT in conducting a flight readiness review of the engine integration into the airframe.

Test engine might not be a certified engine during the flight testing. CVUT will provide to the Supplier engine test and analysis results as required to support flight test release of the test engine in support of the Supplier's effort to obtain the Permit to Fly.

The CVUT will provide substantiation as necessary for the test propeller to support the permit to fly.

#### 3.2.10. Cabin Configuration

Four seats (4) are required in the cabin configuration.

Two (2) of the seats shall have access to real-time test data monitoring through the data acquisition system. These seats are intended for the research engineers to ensure the data acquisition system is functioning properly.

All four seats shall have access to a LAN connection.

All four seats shall have access to electrical power for laptop computers and access to an intercom system. The intercom system shall be capable of communication with the pilots, and also capable of communication separate from the pilots.

#### 3.2.11. Power Extraction

Supplier shall define and design the airframe interface consistent with the interface control document for power extraction from the accessory gearbox of the test engine. The test engine interface requirements will include power extraction requirements. There is no requirement to integrate test engine power extracted with the aircraft system, as long as there is a provision to control test engine power extraction during flight testing up to the levels defined in the ICD. The Supplier shall define a sink to absorb the extracted electrical power and design any airframe modifications required for this power sink as needed to ensure integrity of the airframe.

CVUT will provide aircraft generators and control system designed to interfaces with test engine accessory gearbox.





#### 3.2.12. Fire Suppression System

If a fire suppression system exists in the selected aircraft, the functionality should be maintained after modifications for the test engine.

#### 3.3. Aircraft Modification

- 3.3.1.The Supplier shall conduct the aircraft modifications for all of the aircraft modification design activities listed above. This activity includes:
  - i. procurement of material, parts, and uniquely designed parts as needed
  - ii. disassembly of the aircraft as needed to remove the legacy engine, and the subsequent assembly and installation of the uniquely design parts to accommodate the installation of the test engine.
  - iii. installation of the test engine
  - iv. routing and connection and ongoing maintenance required to achieve test objectives of engine and airframe instrumentation. The engine will be supplied with up to 250 instrumentation leads. Up to 50 pieces of additional instrumentation, including thermocouples and strain gages, will need to be procured and applied to the airframe nacelle and mount structure.
  - v. To offset the weight of the data acquisition system and minimize the aircraft weight to achieve the goals of flight testing, the aircraft interior may be stripped to remove all seats, except for four (4) seats.
  - vi. The Supplier shall design and procure means of easy access to engine, DAS, instrumentation leads and probes for frequent inspection, servicing or maintenance (either through simple removal/openings or with access panels).
- 3.3.2. Manufacturing organization for modification of aircraft components shall be sufficient to meet the experimental aircraft regulatory requirements described in paragraph 3.5.
- 3.3.3.Manufacturing quality systems shall be described. The manufacturing quality system for modified aircraft hardware shall be sufficient to meet the regulatory requirements described in paragraph 3.5. A reference to an appropriate certification will be sufficient.
- 3.3.4. Supplier shall preserve and store the selected aircraft legacy engine and legacy propeller in accordance with the OEM preservation requirements. Engine and propeller shall be returned to CVUT within ten (10) working days from the end of the contract or upon earlier request.

#### 3.4. Data Acquisition System Hardware Requirements

The Supplier shall design and/or procure an off-the-shelf data acquisition system (DAS) capable of recording instrumentation data that will be capable of being installed in the selected airframe. DAS shall be able to interface with up to 3 (three) Scanivalve DSA 3217/3218 Pressure Scanners via Ethernet communication protocol. DAS shall include (2) two laptops or industrial PC assemblies including monitors, fixed to the cabin structure such to enable ergonomic access and ensuring crew safety.





- 3.4.1.The instrumentation requirements, which describe the minimum data acquisition channel counts are as follows:
  - 3.4.1.1. The following instrumentation shall be accommodated in a DAS that may be mounted within the nacelle:
    - 3.4.1.1.1. Low Frequency inputs: A quantity of 90 thermocouple inputs, with 24bit precision of the A/D converter, with a 100Hz sampling frequency. A Dewetron Krypton TH or equivalent DAS is required.
      - A quantity of 110 voltage inputs (pressure transducers and strain gages), with 24bit precision of the A/D converter, with a 20 kHz sampling frequency. A Dewetron Krypton STG or equivalent is required.
    - 3.4.1.1.2. High Frequency inputs: A quantity of 100 voltage inputs (accelerometers and strain gages), with 24bit precision of the A/D converter, with a 200 kHz sampling frequency. A Dewetron Sirius or equivalent is required.
    - 3.4.1.1.3. A quantity of 2 camera inputs, with minimum of 25 frames per second, minimum SD quality, including fully compatible cameras. Camera readings shall be recorded for at least 2 hours of data.
  - 3.4.1.2. The following instrumentation shall be accommodated in a DAS that may be stored within the fuselage:
    - 3.4.1.2.1. A quantity of 100 voltage inputs (ECS, flight deck, spares), with 24bit precision of the A/D converter, with a200 kHz sampling frequency. A Dewetron Sirius or equivalent is required.
    - 3.4.1.2.2. A DAS real time control shall be achieved via a suitable interface. A Dewetron SBOX or equivalent is required.
  - 3.4.1.3. The DAS shall record FADEC parameters that are communicated via a RS-422 databus.
- 3.4.2.The DAS shall connect to the flight data system via an ARINC 429 interface, for the purposes of recording key aircraft flight parameters such as airspeed, altitude, etc.
- 3.4.3.The DAS shall record a time stamp for all of the data to facilitate correlating data from different sensors.
- 3.4.4. There shall be an event button in the cockpit to enable DAS to record with time stamp occurrence of unusual events. Event button should index to provide correlation to event numbers recorded in manual test logs.
- 3.4.5.The DAS data shall be calibrated and validated. The Supplier shall describe a proposed method to validate the DAS functionality.
- 3.4.6.The DAS shall output data in an engineering format compatible with use by the Dewesoft software package for data viewing
- 3.4.7.The DAS shall allow for real-time acquisition and conversion, and display, of the data into engineering units. This is to enable the on-board flight test engineer to ensure the data acquisition system is functioning properly for the flight tests. This capability shall exist for both high frequency and low frequency sensors. It is required to ensure measurements accuracy, related to the recorded parameters, on the aerospace industry level.
- 3.4.8. The Supplier shall describe the proposed data storage system to ensure preservation of the data until it is transmitted to the engineering team. A removable SSD drive is considered standard, two (2) units, one in operation, other under download.





- 3.4.9.The Supplier shall describe the proposed data transmission mechanism to the engineering speed, including the anticipated data download speed.
- 3.4.10. Data Acquisition System Software Requirements are as follows. A Dewesoft or equivalent package should be used.
  - Real-time conversion of data into engineering units
  - Include a data acquisition validation process
  - Label data logged
  - Store data
  - Facilitate downloading data
  - Facilitate data reduction and processing
  - Facilitate on-board GUI

#### 3.5. Regulatory Approval for Experimental Aircraft

- 3.5.1. The Supplier shall obtain an EASA Permit to fly for the modified experimental aircraft and test engine. All necessary activities should be taken and procedures shall be followed to achieve this milestone, including but not limited to:
  - Approval of the modifications,
  - Verification of documentation,
  - Approval of flight and maintenance manuals for the modified aircraft,
  - Flight test operation manual preparation
- 3.5.2. Supplier shall obtain Part M approval and Part 145 approval for the selected aircraft
- 3.5.3.Approval shall be obtained for flight in the Czech Republic, to enable first flight by September 1, 2018 in the Czech Republic. All necessary additional approvals if needed between the relevant CAAs shall be obtained; this condition applies if a ferry flight is needed between the Supplier home country and the Czech Republic.
- 3.5.4. Aircraft shall be approved for flight into known icing conditions prior to September 1, 2018.
- 3.5.5. Supplier shall manage continuing/continued airworthiness (establish or secure cooperation with CAMO) until the end of contract.
- 3.5.6.CVUT will supply sufficient evidence of test propeller and test engine as required to support the Permit to Fly.

#### 3.6. Installation and Instrumentation Connection

- 3.6.1. The Supplier shall install the test engine into the modified aircraft.
- 3.6.2.CVUT will supply an instrumented engine with instrumentation leads, and the Supplier shall connect all of the instrumentation to the aircraft instrumentation interface.
- 3.6.3.CVUT will specify up to 50 instrumentation requirements in the engine bay in addition to the instrumentation provided with the test engine. The instrumentation requirements will





consist of pressure sensors and thermocouples. CVUT will collaborate with the Supplier to define an ICD to define precise instrumentation locations. It will be the responsibility of the Supplier to procure the instrumentation, apply it to the aircraft, calibrate it, and route it to the DAS.

3.6.4.It will be the responsibility of the Supplier to modify the aircraft, and engineer the modifications, as needed to accommodate instrumentation routing from the engine bay to the DAS interface. Instrumentation integration shall be carried out including Inlet, ACOC and ejector, Bleed Air probes and sensors.

#### 3.7. Flight Testing & Flight Operations

- 3.7.1.The Supplier shall develop the aircraft operating manual, and maintenance manual specific for the modified experimental aircraft.
- 3.7.2. Flight testing shall start in the Czech Republic, no later than September 1 2018, with a valid EASA Permit to Fly. Regulatory requirements to enable this, including all relevant CAA requirements shall be satisfied. The Supplier shall describe, as part of the bid, the plan to comply with this requirement.
- 3.7.3. The Supplier shall provide all necessary equipment and personnel to conduct the flight testing, including pilots.
- 3.7.4.It may be assumed that flight test operations after Sept 1 2018 will be within 150 km of Prague. The Supplier shall provide technical input on the selection of the aircraft hangaring location. The Supplier shall coordinate with regulatory agencies as required to secure aircraft operation on paved runway that will allow experimental operation. It will be the scope of a separate public tender and contract to secure the location of the flight testing including hangaring services for the experimental aircraft, and fuel services.
- 3.7.5.The Supplier shall pay all associated fees required to conduct flight testing including airport landing fees and any air traffic control fees.
- 3.7.6.A total of 180 hours of flight testing shall be assumed during the initial flight test campaign between Sept 1, 2018 and June 30, 2019. It is estimated than 90 test flights will be required to complete the 180 flight test hours, and that 80% of the flight tests will occur within the first 4 months of the flight test campaign.
- 3.7.7. The Supplier is responsible to coordinate the approval of flight testing in the Czech Republic as necessary between the CAA of the Supplier's home country and Czech CAA and in case there will be requirements for a flight testing in CVUT's home country to enable ferry flight to Czech Republic with experimental aircraft, the Supplier will be responsible for arranging for and planning for home country flight testing.
- 3.7.8. Flight testing definition. Preliminary flight test objectives are provided below. The service Supplier shall conduct the flight test as required by the project.

The testing will consist of:

1) Shall conduct level flights, which will characterize:





- a) Performance validation vs. performance requirements, cycle deck validation
- b) Operability, incl. surge margin validation
- c) Control system Main and Backup mode transitions
- d) Installation losses (inlet recovery, inlet survey)
- e) High angle of attack, sideslips
- 2) Shall explore all flight regimes
  - a) Power plant cooling
  - b) Propeller governor parameters
  - c) Propeller vibration survey
  - d) Digital engine control monitoring and adjustments
- 3) Shallconduct Engine Starting Tests
  - a) conduct Hot and cold restarts
  - b) Exploration of Starting envelope
- 4) Shall conduct Rotor Lock Testing
  - a) The test engine will be shut down at high altitude points in the operational envelope, the aircraft will descend, and the test engine will relight in the test engine starting envelope
- 5) Shall test Beta mode and Reverse Thrust for propeller controllability
  - a) Ground check plus full operation after touchdown
- 3.7.9. For the test objectives defined by the CVUT, the Supplier shall develop detailed flight plans to accomplish the test objectives. The test objectives will be defined by July 1, 2018.
- 3.7.10. Supplier shall describe the ratings and the experience of the proposed pilots. Supplier shall show the pilot qualifications necessary to operate an experimental Part 23 aircraft. The Supplier shall provide 2 test pilots for each flight test.
- 3.7.11. Flight Test Data Transmission. The services provider shall provide services to ensure data acquisitions systems working effectively during flights.
  - a. Transmission of data to CVUT employees shall be in an agreed upon format in engineering units. It is the responsibility of the Supplier to procure and utilize the necessary data processing software in order to transmit the data to the CVUT's engineering team in engineering units; Dewesoft of Dewetron or another software package with similar capabilities should be used.
  - b. The CVUT will own all testing-related data.
  - c. Up to two (2) flight test engineers shall be provided by the Supplier to accompany each flight to ensure the flights are achieving the desired test points if requested by the CVUT. The Supplier shall quote an hourly rate for each flight test engineer.
  - d. Supplier shall allow CVUT to have up to two (2) research engineers of its own selection on board during the flight testing, provided such research engineers meet the necessary Supplier requirements and qualifications.
  - e. All flight test data shall be transmitted to the CVUT engineering team for analysis within a 24 hour period from completion of each flight test sortie.





- f. Supplier shall ensure the protection of data and transmission of the data to the CVUT. All data will be the intellectual property of the CVUT and may not be shared with any third party without express written permission of the CVUT.
- 3.7.12. Supplier shall describe the proposed ground test support plan for flight operations.

#### 3.8. Aircraft and aircraft systems Line Maintenance

- 3.8.1.The Supplier shall comply with EASA CAMO for the selected aircraft and other FTB specific requirements to maintain airworthiness of the flying test bed. Supplier shall manage continuing/continued airworthiness (establish or secure cooperation with CAMO) until the end of contract.
- 3.8.2.Approved aircraft mechanics for the experimental aircraft shall be available as needed to support maintenance and flight testing.
- 3.8.3.Experimental aircraft maintenance manual shall be developed with modifications as needed relative to the standard maintenance manual.
- 3.8.4.Legacy engine line maintenance, legacy propeller and avionics/accessories line maintenance shall be performed by the Supplier as needed and as defined by the relevant manuals.
- 3.8.5. The Supplier shall provide Aircraft Line Maintenance as well as Line Maintenance of all aircraft components such as but not limited to legacy engine, legacy propeller and all avionics as described by corresponding manuals through the duration of the contract
- 3.8.6. Any special tools needed to maintain unique aspects of the modified experimental aircraft, as required by the regulatory agencies, shall be designed and procured by the Supplier.

#### 4. Access for personnel authorized by CVUT

The service provider shall allow access to CVUT research personnel to its location where the aircraft will be modified for the entire duration of the aircraft modification work and test engine installation. The provider shall allow physical access to the airplane throughout the project including during the modification phase. Access to desks, electricity, and internet shall be available for up to 5authorized personnel of the CVUT to enable collaboration with the engineering services team.

# 5. Customer Furnished Equipment

The customer will furnish the following equipment:

- Instrumented test engine with up to 300 instrumentation lead outs
  - Instrumentation will include thermocouples, pressure sensors, strain gages, and pressure sensors





 Instrumentation leads will be delivered attached to the test engine; it will be the Supplier responsibility to connect the engine instrumentations leads to the Supplier provided instrumentation leads in the aircraft.

# • Aircraft Equipment:

- Mount Isolator elastomeric pads
- o Inlet for test engine
- o Aircraft starter & generator for test engine

C

- o Test Propeller and Propeller Hub/Cone (set) compatible with test engine
- o Bleed valve hardware and control system

#### 6. Schedule and Deliverables

Task	Timing	Туре
Estimated Project Start	15- Sep-2017*	Milestone
Identification of Key Personnel names, including project	15- Sep-2017	Deliverable
manager, and engineering leader		
Delivery of a detailed milestone plan	15- Sep-2017	Deliverable
Receipt of Aircraft	15- Oct-2017	Milestone
Preliminary Design Review	1- Nov-2017	Deliverable
Detail Aircraft Modification Design Documents and drawings	1-March-2018	Milestone
Data Acquisition System Design Specifications with sufficient	1-March-2018	Milestone
documentation		
Part M / Part 145 approval for the modified experimental	1-May-2018	Milestone
aircraft		
Aircraft Modifications Complete and ready to accept engine	1-June-2018	Milestone
Aircraft Operation Manuals Completed Consistent with	1-July-2018	Deliverable
alternate engine configuration		
EASA Permit to Fly with test engine	1-July-2018	Milestone
Technical Review with CVUT to substantiate flight readiness	1-July-2018	Deliverable
Engine installation and instrumentation connections to data	1-August-2018	Deliverable
acquisition system		
First Flight in Czech Republic	1-September-2018	Deliverable
Completion of 150 hours of flight testing with data acquisition	31-Dec-2018	Deliverable
and transmission of data		
Completion of 180 hours of flight testing with data acquisition	30-June-2019	Deliverable
and transmission of data		
Modified Aircraft delivery to the CVUT (transfer of the	per Section 6.3	Deliverable
ownership)	Contract on Work	

<sup>\*</sup> or date of the contract signature if it is earlier

It is assumed that the selected services Supplier will be selected and under contract to commence activities by September 15 2017.

The CVUT plans to make available to the Supplier an instrumented test engine and all related CVUT-provided propulsion hardware as described in section 5no later than 30 May 2018.





Above dates represent the best estimates and are subject to change. CVUT will notify Supplier of any changes in timely manner.

# 7. Compliance with laws and regulations

- 7.1. The Supplier shall strictly comply with all the laws, standards and regulations in force, whether special, contingent or local in nature, or whether they entered into forces after the execution of the contract
- 7.2. The Supplier must also comply with the standards and requirements of any collective labour agreements, the corresponding laws and regulations, protection, insurance and workman's assistance
- 7.3. The Supplier shall apply the legal and regulatory provisions to its suppliers and sub-contractors, as applicable, and shall observe the standards in force for the preferential and mandatory assumption of responsibilities.
- 7.4. The Supplier must provide for insurance against any workplace accidents and any benefits specified by workplace laws or regulations in effect or which are implemented during the course of the project.
- 7.5. The Supplier shall comply with all the requirements of technical regulations and legislation, as well as that not expressly requested in the Documents or the contract, and unfamiliarity by the Supplier with the legal and regulatory provisions related to the work shall be unacceptable.
- 7.6. The Supplier must also observe the domestic technical standards for the performance of projects, the supply of materials and services and the adoption of working methods.
- 7.7. In the absence of the foregoing, internationally accepted foreign technical standards may be accepted.
- 7.8. In particular, it is agreed that any requirement, which the project must comply with, shall be highlighted.





Supplier response template (technical part)





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# 1. Executive Summary

Beechcraft Berlin aviation GmbH (BBA) presents within this document its technical proposal for the Czech Technical University (CVUT) Flying Test Bed (FTB) project.

Beechcraft Berlin aviation (BBA) is a European Aviation Safety Agency (EASA), Federal Aviation Authority (FAA) approved and Textron authorized aircraft maintenance facility, with a particular experience on King Air models. With its EASA approved Part 21J Design and Part 145 organizations BBA is able to provide certified aircraft modifications that include full turn-key solutions covering aircraft acquisition, modification design, installation, flight test, certification and operation with the guarantee of on time execution of any complex project that requires a full integration among design, modifications and flight test.

Located centrally in Berlin, Germany, BBA is strategically located, qualified and experienced to be CVUT's best European partner in delivering success for the FTB project. BBA is equipped to ensure cost and schedule certainty. The short distance between BBA location in Berlin and Prague is even more of a guarantee for smooth execution of the CVUT Project.

BBA will provide services and support through its experienced EASA Part 21J Design Organization, Part 145 Maintenance Organization and Part M Continuing Airworthiness Management Organization (CAMO).

BBA has developed an engineering solution for the CVUT FTB project that provides for the best combination of requirements compliance, performance, value and safety.

BBA proposes a solution that consists of the following:

- A pre-owned Super King Air 350, selected that meets all stated specification requirements.
- The NanoX Commercial Off The Shelf (COTS) Data Acquisition System (DAS), provided by ETEP Corporation, a world leader in airborne and EASA certifiable DAS. The NanoX system's proven capability, flexibility, growth potential, performance and interoperability (compatible with Dewesoft) for aerospace applications with a Mean Time Between Failure (MTBF) in excess of 30000 hours makes it a world's best standard for aerospace and flight test applications.
- An onboard Power Sink consisting of multiple resistor units with redundancy. The Power sink will
  be located within the aft cabin, observable and inspectable during flight, providing for maximum
  safety. Temperature data and functional control of the Power Sink will also be provided to the flight
  crew in the cockpit.
- A 6.6 KW/hour air-conditioning system to extract heat from the cabin and Power Sink, with options for air-conditioning performance improvements.
- A world's best standard engineering team with state of the art software and development tools.
- EASA Part 145 and Textron authorized ground support technicians with over 25 years' experience on King Air.
- 25 years' worth of proven logistics and AOG support network, located centrally in Berlin, close to Prague.

All the above solutions benefit from the engineering work BBA has already done, at its sole risk, during the previous tender phase making BBA ready since to start immediately with the project with the assurance of reducing any program risk due to the new compressed schedule.





It is also important for CVUT tender evaluation that BBA has been able to secure a suitable aircraft to execute the project. Such aircraft will be available practically immediately after the tender announcement and it is fully compliant with all the tender requirements.

In its Part 21 organization BBA uses state of the art Computer Aided Engineering (CAE) software, proven in service for aerospace applications:

- Strand7 FEA Software: A Finite Element Analysis (FEA) software package that provides all solution types (Linear Static, Non-Linear, Dynamic, Buckling, Thermal, etc.) and fully compatible with NASTRAN. Strand7 is affordable and is proven in aerospace defense applications by Australia's Defense Science and Technology Organization (DSTO).
- Dassault Solid Works 3D CAD; one of the best known and proven 3D CAD packages. BBA holds multiple licenses.
- AFGROW Damage Tolerance Analysis. The standard in crack growth and damage tolerance analysis software developed for the United States Air Force (USAF) by Purdue University.
- Siemens VeSys software developed by Mentor Graphics. One of leading industry standards in wiring harness and electrical design.

BBA has a Part 21J Engineering team with the experience and capability to deliver large complex projects. In 2017 the team continues to expand. For the CVUT Flying Test Bed FTB, key personnel will be as follows:

CEO and Managing Director, Head of Design, Accountable Manager

Rolf Käselau has more than 35 years of professional experience in aviation and has been in various management positions of aviation maintenance companies, airlines and business aviation operators. He has a wealth of experience in the field of maintenance, aircraft modifications, continuing airworthiness and avionic upgrades.

He has worked for companies like Eurowings DaimlerChrysler Aviation, Augsburg Airways, Nayak Aircraft Services and has worked in Africa for five years before he joint BBA in 2014.

He is holding an EASA B1 / B2 / C engineer license with several type ratings.





#### • Head Of Airworthiness, CVE Structures:

is an aerospace engineer of twenty years plus experience, currently working as VP Engineering and Head of Airworthiness for BBA.

In his previous roles, was Boeing's Chief Engineer for the Australian F/A-18 Hornet program where he supported the Australian Air Force operationally deployed in the middle east.

has built several engineering teams from the ground up. He was one of the key players in establishing the Wedgetail E-7A In Service Support Program. is highly experienced in hazard analysis and the certification of major/significant changes.

has previously worked for Rolls-Royce, Airbus and Boeing in the UK, United States and Australia. is an experienced leader and manager, having established and lead teams and organizations ranging in size from 6 to 150 professionals.

technical expertise is in the fields of structures, fatigue and damage tolerance, where he has spoken and presented at industry symposiums.

#### Avionics Lead and CVE:

is an Avionics Engineer with over 13 years' experience. is a qualified and trained Avionics CVE coming to BBA from ATR, where he is experienced on the ATR 42 and 72 aircraft. is experienced with the integration and certification of Electronic Flight Instrumentation Systems (EFIS) and is experienced in flight test engineering.

proven technical performance and authorized scope includes Indicating & Recording System (ATA 31) or Data Acquisition Systems, Mutli-Function Computer (MFC), Crew Alerting Computer (CAC), Flight Data Acquisition Unit (FDAU), Flight Data Recorder (FDR), Angle Of Attack (AOA) Navigation (ATA 34) EFIS Displays (CRT and LCD), Radio Altimeter (RA) Communications (ATA 23) Cockpit Voice Recorder (CVR).





#### • Flight Test Pilot, Flight Test CVE, Structures CVE:

is an aerospace engineer (FH Aachen) and test pilot (National Test Pilot School, Mojave). He looks back on over 30 years of professional experience.

Most recently he worked as Head of Office of Airworthiness and CVE at XtremeAir in Cochstedt, (associated with Red Bull Air Racing). He led the complete development and approval of two types of aerobatic aircraft as well as the establishment and approval of the Part21J Design Organization.

His areas of expertise include the aerodynamic layout, design and verification of structure and systems, flight testing, project management and certification.

He was involved in various programs such as A350MRTT, A350 and CASA 235. As part of the Fairchild Dornier 728JET program he worked on the engine nacelle of the BR715 engines (Structural Design and Analysis).

# Design Engineer (Systems):

Trained as Electrical Engineer gained much of his professional experience working for Aerodata AG in Braunschweig as a Project Manager and as a Design and Systems Engineer for Maritime Surveillance programs.

Harald was later involved in several programs of EADS and Airbus for major aircraft conversions. As an independent consultant, he provided services related to developing engineering organizations and their business. Harald is a keen and experienced pilot and holds a private pilot's license.

#### Part 145 Maintenance Leader:

is an EASA certified B1 of 10 years plus experience. Tobias has previously worked for Haitec Aircraft Maintenance and Airbus in Germany

In his previous roles, was Maintenance Manager for Haitec's Business Aviation company Haitec VIP Maintenance. He established the Haitec VIP Maintenance program, Boeing 747 Line Maintenance Station and was involved in establishing Haitec's worldwide scheduled and AOG Line maintenance capability.





For Airbus worked in the Elbe Flugzeugwerke P2F Project and was involved in 30 plus conversions of Passenger Aircrafts into freighters.

is a leader having built several Teams from the ground up and has lead multidisciplinary teams from 5 to 50 persons. practical expertise is in the field of large cabin business jets base and line maintenance and modifications from LOPA changes up to Passenger to freighter conversion.

# **Professional Qualification**

The next table contains the list of Professional Qualification Documentation and the corresponding reference numbers that BBA currently holds. The Original Professional Qualification Documentation is enclosed with the BBA submission package.

Professional qualification Documentation	Reference Number
German Trade Register Registration	HRB 10354 CB
EASA PART M	DE.MG.0213
EASA PART 145	DE.145.0213
EASA PART 21J	EASA.21J.231

**Table 1.1: List of Professional Qualifications** 





#### **Minimum LID Requirements**

- a) Successfully obtaining EASA Permit to Flight
- b) Completed Test Flight Hours on a modified aircraft in Experimental mode and/or after approved STC by EASA
- c) Completion of aircraft modification project involving airframe structural modification and Data Acquisition System development and installation
- d) Completion of aircraft modification project involving aircraft avionics or control system interface

Project Name	Period	a)	b)	c)	d)	STC	Identification of Client
LIDAR	May 2011/ Dec 2012	Yes	34	Yes	Yes	Yes	Institutul National de Cercetare- Dezvoltare Aerospatiala "ELIE CARAFOLI"- I.N.C.A.S Romania
UNIFIS	Oct 2011/ Feb 2013	Yes	6	Yes	Yes	Yes	Romanian Civil Aeronautical Authority - Romania
Hawkeye	Nov 2012/ Mar 2013	N/A	6	Yes	Yes	N/A	Institutul National de Cercetare- Dezvoltare Aerospatiala "ELIE CARAFOLI"- I.N.C.A.S Romania
Known Icing	Jan 2013/ Jul 2013	N/A	6	Yes	Yes	Yes	Institutul National de Cercetare- Dezvoltare Aerospatiala "ELIE CARAFOLI"- I.N.C.A.S Romania
FDR	Jan 2013/ Jul 2013	N/A	0	Yes	Yes	N/A	Classified under terms of NDA
Activation of Metric altitude indication	Dec 2015/ Jan 2016	N/A	0	N/A	Yes	N/A	Hemans Enterprises Ltd. BRITISH VIRGIN ISLANDS
Skyeye Mission Segment	Oct 2015/ Nov 2015	N/A	3	N/A	N/A	N/A	Elbit Systems Ltd. Israel
Total		2	55	5	6	3	

**Table 1.2: List of Relevant Projects** 





#### 2. Abbreviations:

AC: Alternating Current

A/C: Aircraft

AFGROW: Air Force Growth Amdt.: Amendment

AMM: Aircraft Maintenance Manual

AOA: Angle Of Attack

ARINC 429: Avionics data bus communication technical standard

AWG: American Wire Gage

BBA: Beechcraft Berlin aviation GmbH

CAA: Civil Aviation Authority
CAC: Crew Alerting Computer
CAD: Computer Aided Design

CAMO: Continuing Airworthiness Management Organization

CAS: Cabin Alert System
CDU: Cockpit Display Unit
COTS: Commercial Of The Shelf
CPL: Commercial Pilots Licence

CRT: Cathode Ray Tube

CS23: Certification Standard 23

CVE: Compliance Verification Engineer

CVR: Cockpit Voice Recorder

CVUT: Czech Technical University (Contracting authority)

DAS: Data Acquisition System

DC: Direct Current

Dewetron: Industrial standard for data acquisition systems

DOH: Design Organization Handbook
EASA: European Aviation Safety Agency
EFIS: Electronic Flight Instrument System

EGT: Exhaust Gas Temperature

EU: European Union

FAA: Federal Aviation Authority

FADEC: Full Authority Digital Engine Control

FCL: Flight Crew Licence

FDAU: Flight Data Acquisition Unit

FDR: Flight Data Recorder
FEA: Finite Element Analysis
FIKI: Flight Into Known Icing
FIS: Flight Inspection System
FOD: Foreign Object Damage

FTB: Flying Test Bed FTP: Flight Test Program FTO: Flight Test Order

FTOM: Flight Test Operations Manual

FTS: FADEC Test System
GCU: Generator Control Unit
GM: Guidance Material

GmbH: Gesellschaft mit beschränkter Haftung





GUI: Graphical User Interface IAW: In Accordance With

ICD: Interface Control Document IFR: Instrument Flight Rules

ISA: International Standard Atmosphere

ISR: Intelligence Surveillance and Reconnaissance

KIAS: Knots indicated airspeed KCAS: Knots calibrated airspeed KTAS: Knots true airspeed

KTAS: Knots true airspeed
LAN: Local Area Network
LCD: Liquid Crystal Display
LFTE: Lead Flight Test Engineer
Mbps: Megabits per second
MFC: Multi-Function Computer
MID: Maintenance Induced Damage

MMPDS: Metallic Materials Properties Development Standardization

MRO: Maintenance Repair and Overhaul

NDA: Non-Disclosure Agreement

OEM: Original Equipment Manufacturer

PLA: Power Level Angle

QTY: Quantity

RF: Radio Frequency
S-N: Stress versus Cycles
SSD: Solid State Drive

STC: Supplemental Type Certificate TCDS: Type Certificate Data Sheet

TCP/IP: Transmission Control Protocol / Internet Protocol





## 3. Flying Test Bed Worskscope Details

Confirm the compliance of your proposal with the buyer's definition of "shall", "will" and "should" requirements:

We hereby confirm the compliance of our proposal with the buyer's definition of "shall", "will" and "should".

Confirm your proposal complies with all "shall" statements and requirements listed throughout the tender documentation:

We hereby confirm that our proposal complies with all "shall" statements and requirements listed throughout the tender documentation.

#### 3.1. Aircraft Selection & Procurement

Describe how the selected aircraft complies with the requirements and how you satisfy required characteristics:

Selected aircraft type and model: Beechcraft Super King Air 350 (Model B300), refer Figure 3.1.



Figure 3.1: Beechcraft Super King Air 350





#### Compliance with required characteristics:

- 1: The Beechcraft Super King Air 350 is compliant. It has two gas turbine engines in tractor configuration (Refer Super King Air 350, 350i & 350C, (Models B300 & B300C) Pilots Operating Handbook and FAA Approved Flight Manual, Section 1, General, Descriptive Data).
- 2: The Beechcraft Super King Air 350 is compliant. It is capable of 35000 ft cruise altitude (Refer Super King Air 350, 350i & 350C, (Models B300 & B300C) Pilots Operating Handbook and FAA Approved Flight Manual, Section 2, Limitations, Maximum Operating Altitude Limits).
- 3: The Beechcraft Super King Air 350 is compliant. It has a minimum controlled air speed of 81 KIAS in Landing Configuration (Refer Super King Air 350, 350i & 350C, (Models B300 & B300C) Pilots Operating Handbook and FAA Approved Flight Manual, Section 2, Limitations, Airspeed Limitations).
- 4: The Beechcraft Super King Air 350 is compliant. It has a maximum cruise speed 308 KTAS at 25000 ft altitude in ISA conditions (Refer Super King Air 350, 350i & 350C, (Models B300 & B300C) Pilots Operating Handbook and FAA Approved Flight Manual, Section 5, Performance, Maximum Cruise Power).
- 5: The Beechcraft Super King Air 350 is compliant. It is capable of Level Flight with one Engine Inoperative up to 24000 ft (Refer Super King Air 350, 350i & 350C, (Models B300 & B300C) Pilots Operating Handbook and FAA Approved Flight Manual, Section 5, Performance, One Engine Inoperative Maximum Cruise Power).
- 6: The Beechcraft Super King Air 350 is compliant. The standard engine propeller diameter for the King Air 350 is 105 inches (Refer Super King Air 350, 350i & 350C, (Models B300 & B300C) Pilots Operating Handbook and FAA Approved Flight Manual, Section 1, General, Propellers).
- 7: The supplied Beechcraft Super King Air 350 will be compliant. It will be demonstrated that the aircraft can accommodate an engine with 900 to 1300 shaft horsepower. The PT6A-67A engine has 1272 shaft horsepower and discussions with Textron clearly indicate 1300 shaft horsepower can be demonstrated as within the existing certification basis. Section 3.2 of this Tender document fully describes a robust technical solution on how compliance will be demonstrated.
- 8: The Beechcraft Super King Air 350 is compliant. The Super King Air 350 is EASA approved under EASA TCDS IM.A.277 and is therefore able to be registered in any member state. BBA can confirm that it has a German registered Super King Air 350 under the care of its Part M Continuing Airworthiness Management Organization (CAMO).
- 9: The supplied Beechcraft Super King Air 350 will be compliant. All aircraft maintenance history documents will be provided to show that the aircraft and all components have been maintained at OEM authorized service centers only.

BBA will supply an aircraft that is capable of operating for at least 6000 cycles and 3000 hours in the modified condition. Aircraft log books and maintenance history documents will be supplied for verification, as applicable.

It should be noted that the King Air 350 does not have a structural life limit; however, at certain high cycle and hour intervals, inspections and replacements, as defined per the AMM are required for continued airworthiness. Inspections and replacements that mostly affect cost of ownership and aircraft availability





commence after 18,000 flight hours for wing structure and between 5000 to 10000 cycles for fuselage structure (refer Super King Air Model B300/B300C – Airworthiness Limitations Manual).

10: The supplied Beechcraft Super King Air 350 will be compliant. Aircraft maintenance history documents will be provided to show that the aircraft's components have been maintained at OEM authorized service centers only.

Aircraft maintenance history documents will also be provided to show that no aircraft components will require removal for scheduled maintenance or overhaul for two years after delivery of the aircraft to CVUT.

- 11: The supplied Beechcraft Super King Air 350 will be compliant. Aircraft maintenance history documents will be provided to show that the engine and propellers have been maintained at OEM authorized service centers only. The engines supplied will have a minimum of 1200 flight hours remaining until next hot Section Inspection or overhaul. The remaining useful life will be 6000 cycles and 3000 flight hours.
- 12: The supplied Beechcraft Super King Air 350 will be compliant. The year of Manufacture will be not older than 1995.
- 13: The Beechcraft Super King Air 350 is compliant. Aircraft interface with the engine is via a single mount plane (refer Beechcraft Super King Air Model B300/B300C Maintenance Manual, Power Plant, Mounts, Description and Operation).
- 14: The Beechcraft Super King Air 350 is compliant; refer EASA Type Certificate Data Sheet (TCDS) EASA.IM.A277. The aircraft will sustain the test engine loads. Refer to Section 3.2.2 of this Tender Response Document for further information on how BBA will ensure that the aircraft will sustain the loads of the test engine.
- 15: The supplied Beechcraft Super King Air 350 will be compliant. The supplied aircraft will be delivered with an analogue avionics package, based primarily upon analogue gauges. It should be noted for the target aircraft build year, some indicators, such as artificial horizon and attitude indicator will be displayed electronically, however the sensors behind the displays will be analogue (e.g. gyroscopic). Legacy engine instrumentation will be purely analogue.
- 16: The supplied Beechcraft Super King Air 350 will be compliant. The selected aircraft will receive a full Phase 1-4 Inspection including finding rectification, corrosion inspection and corrosion treatment and both engines will receive a boroscope and hot Section inspection. For all above mentioned tasks an EASA Certificate of release to Service will be provided by BBA's OEM approved and EASA authorized Part 145 maintenance department.
- 17: The supplied Beechcraft Super King Air 350 will be compliant. Aircraft paint will be stripped and the entire aircraft repainted with white paint.
- 18: The supplied Beechcraft Super King Air 350 will be compliant. The interior will be free of visible damages, any odor, stains and will receive a deep cleaning.
- 19: The supplied Beechcraft Super King Air 350 will be compliant. The avionics architecture will be capable to interface with an ARINC 429 Data bus.





- 20: The Beechcraft Super King Air 350 is compliant. Aircraft avionics are approved for unrestricted operation within the European Union (EU) (refer EASA TCDS EASA.IM.A277 and Refer Super King Air 350, 350i & 350C, Models B300 & B300C Pilots Operating Handbook and FAA Approved Flight Manual, Section 2, Limitations, Avionics Limits).
- 21: The Beechcraft Super King Air 350 is compliant. The King Air 350 is capable of Instrument Flight Rules (IFR) flights, (refer EASA TCDS EASA.IM.A277).
- 22: The Beechcraft Super King Air 350 is compliant. The King Air 350 maximum payload is in excess of 1600 lb (refer Super King Air 350, 350i & 350C (Models B300 & B300C) Pilots Operating Handbook and FAA Approved Flight Manual, Section 6, Weight and Balance/Equipment List). Precise payload capacity can vary when considering pre-owned aircraft. Typical weights and limitations for the Super King Air 350 are as shown below in Table 3.1.

Weight	Value
Maximum Ramp Weight	16000 lb (7530 Kg)
Maximum Takeoff Weight	16500 lb (7484 Kg)
Maximum Landing Weight	15675 lb )7110 Kg)
Usable Fuel Weight	5192 lb (2355 Kg)
Basic Operating Weight	9455 lb (4289 Kg)
Useful Load	7145 lb (3241 Kg)
Maximum Payload	3545 lb (1608 Kg)
Full Fuel Payload	1953 lb (866 Kg)

Table 3.1: Typical Super King Air 350 Weights Data

It should be noted that the weights data supplied above is indicative non-authoritative data from the OEM (Textron) website based upon the latest King Air 350i (<a href="http://beechcraft.txtav.com/en/king-air-350er#specs">http://beechcraft.txtav.com/en/king-air-350er#specs</a>). The pre-owned aircraft supplied will vary slightly from some of these values shown. The supplied Beechcraft Super King Air 350 will be compliant and will have a payload in excess of 1600 lb, typically up to 3545 lb.

23: The supplied Beechcraft Super King Air 350 will be compliant. The selected Aircraft Cabin will have at least four seats plus one Toilet. Refer Section 3.2.10 Cabin Configuration for more information on the cabin layout.

## 3.2. Engine-Aircraft integration Engineering

Part of business secret

## 3.3. Aircraft Modification

- 3.3.1. Describe how your proposal complies with the requirements defined in this Section:
  - i. : BBA has a proven logistics network to provide timely procurement and delivery of standard parts. Through BBA's Special Mission Aircraft and MRO business, BBA has developed a





network of suppliers that can provide a variety of specialized custom fabrications. All custom fabrications will be certified by BBA's Part 21J design organization.

- ii. The aircraft will be disassembled to the extent required at BBA's Textron authorized hangar facility in Schönefeld, Berlin, Germany. All removed parts will be stored in an exclusive dedicated quarantined storage area located within a heated hangar. Installation of the uniquely designed parts will be performed by our highly experienced EASA certified maintenance personnel with more than 25 Years of experience in maintenance repair and overhaul of King Air aircraft. All installations will be performed IAW approved publications or instructions prepared and approved by BBA'S Part 21J Engineers.
- iii. The test engine will be installed at BBA's Textron authorized hangar facility in Schönefeld, Berlin, Germany. Installation will be performed by EASA Part 145 authorized and Textron authorized technicians. Installation will be IAW approved publications or instructions prepared by Part 21J Engineers, as applicable.
- iv. Instrumentation will be routed through the leading edge using existing cutouts and routing. All instrumentation will be installed by BBA's EASA Part 145 authorized and Textron authorized B1 and B2 technicians IAW instructions issued and authorized by BBA's Part 21 Design Organization. For the purchase of additional instrumentation, such as strain gauges and thermocouples, all instrumentation specifications will be processed through BBA's Part 21J Design Organization for design requirements review and verification.
- v. BBA is highly experienced with special mission aircraft modifications for the King Air. It is BBA's assessment that the test engine and all mission equipment can be incorporated without a significant impact on aircraft weight and balance.
- 3.3.2. Describe how your proposal complies with the requirements defined in this Section:

BBA holds the following certificates specific to the required modification activity:

- a. EASA Part 21J (EASA.21J.231)
- b. EASA Part M (DE.MG.0213)
- c. EASA Part 145 (DE.145.0213)
- d. Textron Authorized Service Center
- e. FAA repair station (Z3VY292Y)

BBA will obtain the necessary experimental flight permits as described in Section 3.5.





## 3.3.3.Describe how your proposal complies with the requirements defined in this Section:

BBA satisfies all quality requirements and is subject to routine audits for the following certifications. Per the Technical Specification, Section 3.3.3, a reference to the appropriate certification is satisfactory.

- a. EASA Part 21J (EASA.21J.231)
- b. EASA Part M (DE.MG.0213)
- c. EASA Part 145 (DE.145.0213)
- d. Textron Authorized Service Center
- e. FAA repair station (Z3VY292Y)

## 3.3.4. Describe how your proposal complies with the requirements defined in this Section:

The aircraft legacy engines and propellers will be preserved following the OEM preservation requirements and guidelines. All preserved equipment will be stored in a dedicated quarantine area, within BBA's heated hangar at Berlin Schönefeld airport. The preserved engine and propeller will be accessible to CVUT at any time.

All legacy parts will be returned to CVUT at any time upon request or no later than 10 working days from the end of contract.

## 3.4. Data Acquisition System Hardware Requirements

## Part of business secret

# 3.5. Regulatory Approval for Experimental Aircraft

3.5.1. Describe how your proposal complies with the requirements defined in this Section:

BBA's EASA approved Design Organization process VA-EB-10 "Flight Test Operation Manual" addresses all activities to obtain an EASA permit to fly for the modified experimental aircraft and test engine. All necessary activities will be taken and procedures are in place to readily achieve the required milestones, including but not limited to:

- a. Approval of the modifications
- b. Verification of documentation
- c. Approval of flight and maintenance manuals for the modified aircraft
- d. Flight test operation manual

## 3.5.2. Describe how your proposal complies with the requirements defined in this Section:

As an authorized Hawker Beechcraft Service Center, BBA holds EASA Part M Continued Airworthiness Management Organization (CAMO) authorization, (reference DE.MG.0213), and maintenance organization approval DE.145.0213 for all Beechcraft King Air models.

3.5.3. Describe how your proposal complies with the requirements defined in this Section:





BBA will obtain a permit to fly as detailed in Design Organization process VA-EB-10 "Flight Test Operation Manual". This permit to fly will be issued by EASA pursuant to Regulation (EC) 216/2008, Article 5(4)(a) and will certify that the aircraft is capable of safe flight for the purpose and within the conditions required by CVUT. The permit to fly will be valid in all EASA Member States.

BBA will obtain separate approval from the competent authorities of non-member states, if flights within their airspace should be required.

All permits to fly and required approvals will be obtained in a timely manner to enable first flight in the Czech Republic by September 1 2018.

3.5.4. Describe how your proposal complies with the requirements defined in this Section:

BBA will obtain approval of the flight conditions for flight into known icing conditions for the modified aircraft prior to September 1, 2018. The basic unmodified Super King Air 350 is certified for Flights into Known Icing (FIKI) conditions.

3.5.5. Describe how your proposal complies with the requirements defined in this Section:

BBA will manage continued airworthiness through its EASA approved CAMO DE.MG.0213 until the end of contract.

3.5.6. Describe how your proposal complies with the requirements defined in this Section:

BBA will coordinate with CVUT the technical validation of preliminary analysis and tests to show sufficient evidence of test propeller and test engine as required to support the Permit to Fly.

It will be shown that the data given in EASA Form 18A "Flight Condition for a Permit to Fly – Approval", Field 6 "Aircraft Configuration", is safe for the intended operation under the Field 8 Conditions/Restrictions, the substantiations (compliance documents) referred to in Field 7 "Substantiations" are complete and sufficient to substantiate that the aircraft used under the identified configuration, conditions and/or restrictions can perform the intended flights safely.

The analysis, calculations, tests and/or other means used to determine under which conditions or restrictions the aircraft can perform the intended flights safely will be independently technically verified.

## 3.6. Installation and Instrumentation Connection

3.6.1. Describe how your proposal complies with the requirements defined in this Section:





The test engine will be installed at BBA's Textron authorized hangar facility in Schönefeld, Berlin, Germany. Installation will be performed by EASA Part 145 authorized and Textron authorized B1 and B2 technicians. Installation will be performed based upon authorized installation instructions provided by BBA's Part 21J Design Organization.

3.6.2.Describe how your proposal complies with the requirements defined in this Section:

All test engine instrumentation leads will be routed through the aircraft to the DAS.

All instrumentation will be connected to the aircraft instrumentation system interface IAW authorized instructions prepared and provided by BBA's Part 21 Design Organization.

Connection will be performed by EASA Part 145 authorized and Textron authorized B1 and B2 technicians.

3.6.3. Describe how your proposal complies with the requirements defined in this Section:

BBA will collaborate with CVUT to define the ICD for the instrumentation. BBA commits to splicing all instrumentation, engine to aircraft, as required.

BBA will ensure all thermocouples and pressure sensors selected are of aerospace standard and are suitable for the environmental temperatures and pressures.

All instrumentation selection will be processed through BBA's Part 21J Design Organization for design specification review and requirements verification.

All instrumentation will be installed by BBA's EASA Part 145 authorized and Textron authorized B1 and B2 technicians IAW instructions issued and authorized by BBA's Part 21 Design Organization.

3.6.4.Describe how your proposal complies with the requirements defined in this Section:

BBA uses the Siemens software, Mentor Graphics VeSys to design all electrical and wire harness installations (<a href="https://www.mentor.com/products/electrical-design-software/vesys-circuit-design/wire-harness-design/">https://www.mentor.com/products/electrical-design-software/vesys-circuit-design/wire-harness-design/</a>). Refer Section 3.2.5 for further information on electrical installations.

BBA is highly experienced with a variety of Special Mission installations, including Intelligence Surveillance and Reconnaissance (ISR), Flight Inspection Systems (FIS), Atmospheric Research, Cloud Seeding and Medical Evacuation. All such installations have required BBA to address unique modifications and instrumentation routing (refer Figure 3.18).









Figure 3.18: Examples of Wiring Harness Installations

BBA intends to route instrumentation leads from the engine to the DAS along the leading edge using existing routes and through existing penetrations. Additional clips, offsets and brackets will be installed as required. BBA has experience in routing instrumentation in this area of the aircraft (refer Figure 3.18) and is aware of all limitations that can affect such installations, such as bend radius restrictions and structural penetration size limits.





## 3.7. Flight Testing & Flight Operations

3.7.1. Describe how your proposal complies with the requirements defined in this Section:

BBA has an exercised, viable and proven plan to develop manuals.

BBA will develop the aircraft operating manual, and maintenance manual specific for the modified experimental aircraft in accordance with Design Organization process VA-EB-08 "Control of Handbooks".

3.7.2. Describe how your proposal complies with the requirements defined in this Section:

BBA has an exercised, viable plan to comply with regulations and obtain EASA permits to fly.

BBA will obtain an EASA permit to fly based on approved flight conditions in accordance with Design Organization process VA-EB-10 Flight Test Operation Manual (FTOM). Furthermore, BBA will inquire with Civil Aviation Authority and Air Navigation Services of the Czech Republic which additional requirements apply to the subject test flights immediately after start of the joint project, and make sure that said requirements are satisfied to permit start of flight testing no later than September 1, 2018.

3.7.3. Describe how your proposal complies with the requirements defined in this Section:

BBA's EASA approved Design Organization has an experimental test pilot on staff. A graduate from NTPS (National Test Pilot School), he holds an EASA Part Flight Crew License (FCL) Commercial Pilot License, CPL(A) with Flight Test Rating Category 1, Multi-Engine-, Instrument- and Flight Instructor Ratings, and has been engaged with Part 23 airplane flight testing since 2010.

BBA also has a network of additional test pilots available through its subcontractor network.

BBA will provide all necessary equipment and personnel to conduct the flight testing, including pilots.

3.7.4. Describe how your proposal complies with the requirements defined in this Section:

BBA is compliant and will secure operation on paved runways.

BBA has strong ties to the General Aviation community in the Prague area, including several current customers. BBA has identified several possible suppliers for hangar and fuel services in the Prague area.

BBA will provide technical input for the selection of hangar and fuel services as required by CVUT.

3.7.5. Describe how your proposal complies with the requirements defined in this Section:

All associated fees, including airport landing fees, air traffic control fees and any other costs related to the conduction of the flight test shall be carried by BBA.





## 3.7.6. Describe how your proposal complies with the requirements defined in this Section:

BBA is committed to the flight test schedule.

BBA will have sufficient flight crew and maintenance personnel available to support the proposed flight test schedule. BBA is approximately 3 hours' drive away from Prague, meaning BBA can provide additional or substitute persons as required at short notice, mitigating flight test schedule risks associated with personnel.

3.7.7. Describe how your proposal complies with the requirements defined in this Section:

BBA will obtain an EASA permit to fly that will be valid in all EASA Member States, see 3.5.3. BBA will obtain separate approval from the competent authorities of non-member states, if flights within their airspace should be required, and show compliance with possible additional national requirements with Civil Aviation Authority and Air Navigation Services of the Czech Republic, refer Section 3.7.2.

3.7.8. Describe how your proposal complies with the requirements defined in this Section:

BBA will conduct the flight tests as required by the project.

The testing will consist of:

- 1) Level flights, which will characterize:
  - a) Performance validation vs. performance requirements, cycle deck validation
  - b) Operability, incl. surge margin validation
  - c) Control system Main and Backup mode transitions
  - d) Installation losses (inlet recovery, inlet survey)
  - e) High angle of attack, sideslips
- 2) Exploration of all flight regimes
  - a) Power plant cooling
  - b) Propeller governor parameters
  - c) Propeller vibration survey
  - d) Digital engine control monitoring and adjustments
- 3) Engine Starting Tests
  - a) Hot and cold restarts
  - b) Exploration of Starting envelope
- 4) Rotor Lock Testing





- a) The test engine will be shut down at high altitude points in the operational envelope, the aircraft will descend, and the test engine will relight in the test engine starting envelope
- 5) Beta mode and Reverse Thrust for propeller controllability
  - a) Ground check plus full operation after touchdown
- 3.7.9. Describe how your proposal complies with the requirements defined in this Section:

To accomplish the test objectives, BBA will develop, in accordance with its Design Organisation process VA-EB-10 "Flight Test Operation Manual", a Flight Test Program (FTP) that will contain (typically at a minimum):

- a. Sequence and planning of flights (with phases if needed)
- b. Reference to applicable CVUT requirements
- c. Method of flight test
- d. Safety provisions (analysis, emergency devices, airspace, etc.)
- e. Safety-related instruments and equipment
- f. Design Limitations
- g. Ground and flight crew
- h. Facilities / airport information
- i. Test aircraft configuration versus target configuration
- j. Flight test equipment / instrumentation
- k. Maintenance of the test aircraft

For each single test point BBA will prepare a Flight Test Card and perform a risk analysis. Mitigating measures to minimize identified risks will be included in the test card.

For each test flight BBA will prepare a specific Flight Test Order (FTO), identifying the sequence of test points and the associated Flight Test Cards. An additional risk analysis will be performed specifically addressing the sequence of test points (i.e. those aspects that are not properly covered by risk assessment of each single test point).

## The FTOs will contain:

- a. Category of the flight IAW EASA Part 21, Appendix XII
- b. Composition of the crew
- c. Names of person other than crew members, if applicable
- d. The required facilities and airspace
- e. The required weather conditions





- f. Test points / tests to be performed, with test method and means used for the recording (e.g. Flight test equipment / instruments)
- g. Safety considerations / emergency procedures relevant to the flight
- h. Conditions that could lead to interrupt the flight will be clearly identified
- Aircraft configuration items (directly or indirectly) relevant to the test to be highlighted to the crew
- j. Weight and balance / Loading of the aircraft
- k. Restrictions relevant to the flight to be highlighted to the crew

Other items may be added to support CVUT test objectives and specific needs.

3.7.10. Describe how your proposal complies with the requirements defined in this Section:

BBA's EASA approved Design Organization has an experimental test pilot on staff. A graduate from NTPS (National Test Pilot School), he holds an EASA Part Flight Crew License (FCL) Commercial Pilot License, CPL(A) with Flight Test Rating Category 1, Multi-Engine-, Instrument- and Flight Instructor Ratings, and has been engaged with Part 23 airplane flight testing since 2010.

BBA also has access to test pilots throughout its subcontractor network. A second test pilot will be engaged after the start of the project and additional reserve test pilots will be identified.

- 3.7.11. Describe how your proposal complies with the requirements defined in this Section:
  - a. : BBA is compliant. The ETEP DTMUX software will enable BBA to provide data transmission to CVUT in any format and units required.
  - b. : BBA acknowledges that all test data is the intellectual property of CVUT.
  - c. A flight test engineer assigned for duties in an aircraft for the purposes of conducting flight tests or assisting the pilot in the operation of the aircraft and its systems during flight test activities is known as a Lead flight test engineer (LFTE). A more detailed definition is shown in EASA GM No 1 to Appendix XII to Part-21.
    - BBA will provide up to two (2) lead flight test engineers to accompany each flight to ensure the flights are achieving the desired test points, if requested by the CVUT.
  - d. BBA will allow CVUT to have up to two (2) research engineers of its own selection on board during the flight testing, provided such research engineers meet the necessary BBA and EASA requirements and qualifications.
    - BBA will revise the FTOM and liaise with EASA to facilitate the participation of CVUT research engineers and their on-board presence during test flights.
  - e. BBA is compliant. All data will be downloaded to CVUT within 24 hours of each test flight completion. Data download rate from the NanoX system is 200 Mbps and can be achieved via Ethernet access. BBA's Part 21J will provide comprehensive instructions





for data downloading, to facilitate download by BBA or CVUT personnel. ETEP will provide assured Technical and Software support for NanoX for 10 years after delivery.

f. BBA will put in place the appropriate Non-Disclosure Agreements (NDAs) to ensure that BBA is bound to handle and protect CVUT's data to the same levels as its own Intellectual Property. BBA will not disclose test data to any third parties without the express written direction and authorization of CVUT.

## 3.7.12. Describe how your proposal complies with the requirements defined in this Section:

BBA will provide experienced and certified personnel on site for ground support of flight operations. At a minimum one aircraft mechanic and an EASA Part 145 certified B1 mechanic will be available. BBA is approximately 3 hours' drive away from Prague, meaning BBA can provide additional or substitute persons as required at short notice, mitigating flight test schedule risks associated with personnel.

BBA will conduct maintenance of the airframe and legacy system in accordance with approved maintenance planning document and publications for continuing airworthiness.

BBA Part 21J will provide maintenance planning documentation to the BBA Part M CAMO, to facilitate planning and conduct of maintenance for the experimental aircraft modifications. BBA's Part 21J will provide an Experimental Aircraft Maintenance Manual (AMM) Supplement for maintenance of all aircraft modifications.

BBA will liaise with CVUT and review the ICD to ensure all maintenance actions for the test engine are planned and instructions are provided in the Experimental AMM Supplement.

BBA has the necessary qualifications, experience and personnel, with close proximity to the area of operation to clearly demonstrate that BBA's ability to support flight operations through to the end of contract represents a very low risk for the contracting authority.

#### 3.8. Aircraft and Aircraft Systems Line Maintenance

3.8.1. Describe how your proposal complies with the requirements defined in this Section:

BBA holds a Part M EASA approval for a Continuing Airworthiness Management Organization (CAMO) under EASA approval Number DE.MG.0213 in accordance with European commission Regulation 1321/2014. BBA will provide continued airworthiness management of the selected aircraft until the end of contract. The fact that the CAMO is part of BBA is another guarantee of continuity of support of the aircraft after the modifications implemented by EASA PART 21J and EASA PART 145 BBA organizations without any possible lack of information on the aircraft configuration.

BBA's CAMO is highly experienced and subject to routine EASA audits. BBA's CAMO has the necessary qualifications, experience and personnel, with close proximity to the area of operation to clearly demonstrate that BBA's ability to provide CAMO support through to the end of contract represents a very low risk for the contracting authority.





3.8.2. Describe how your proposal complies with the requirements defined in this Section:

BBA will have Part 145 approved aircraft mechanics available as needed to support maintenance and flight testing.

3.8.3. Describe how your proposal complies with the requirements defined in this Section:

Experimental AMM Supplement will be developed reflecting all the modifications performed on the aircraft.

3.8.4. Describe how your proposal complies with the requirements defined in this Section:

BBA will ensure that all legacy engine line maintenance, legacy propeller, avionics and accessories line maintenance is conducted IAW approved publications and instructions for continued airworthiness. Maintenance shall be conducted by authorized Part 145 technicians.

3.8.5.Describe how your proposal complies with the requirements defined in this Section:

Aircraft Line Maintenance as well as Line Maintenance of all legacy components will be provided, IAW approved publications and instructions for continued airworthiness. Maintenance shall be conducted by authorized Part 145 technicians.

3.8.6. Describe how your proposal complies with the requirements defined in this Section:

Any special tools needed to maintain unique aspects of the modified experimental aircraft, as required by the regulatory agencies, will be designed or procured by BBA. New or unique tooling will be assessed by BBA's Part 21J for safety and suitability prior to use on the aircraft.

Unique tooling will be assessed for risks such as Maintenance Induced Damage (MID), Foreign Object damage (FOD) and workplace health and safety.

Use of unique tooling will be IAW instructions provided by BBA's Part 21J Design Organization only.

## 4. Access for Personnel Authorized by Buyer

Describe how your proposal complies with the requirements defined in this Section:

Full access to BBA facilities and physical access to the aircraft for up to 5 CVUT authorized personnel will be arranged by BBA for the entire period of the project and access to desks, electricity and internet will be provided.

CVUT personnel on site will be required to undertake all mandatory safety related training and comply with all workplace health and safety regulations and policies of BBA.





## 5. Customer Furnished Equipment

Describe how your proposal complies with the requirements defined in this Section:

Refer to Section 3.2.5, 3.2.8, 3.3.1.iv and 3.6 for details on how BBA will route and connect the supplied instrumentation lead outs.

BBA will install the mount isolator elastomeric pads IAW ICD requirements provided by CVUT. BBA will work with CVUT to ensure that isolator to engine mount installation requirements are understood.

BBA will modify the test engine inlet IAW the requirements of ICD supplied by CVUT as described in Sections 3.2.2 and 3.2.6.

The aircraft starter and generator will be installed on the test engine by BBA Part 145 authorized technicians IAW instructions provided by BBA's Part 21 Design Organization. BBA will include instructions for removal and installation into the Experimental AMM Supplement.

The test propeller and propeller hub/cone will be installed on the test engine by BBA Part 145 authorized technicians IAW instructions provided by BBA's Part 21 Design Organization. BBA will include instructions for removal and installation into the Experimental AMM Supplement.

The bleed valve hardware and control system will be installed on the test engine by BBA Part 145 authorized technicians IAW instructions provided by BBA's Part 21 Design Organization. BBA will include instructions for removal and installation into the Experimental AMM Supplement. Refer to Section 3.2.3 for further details on bleed air integration.





## 6. Schedule and Deliverables

Describe how your proposal complies with the requirements defined in this Section:

BBA is approximately 3 hours' drive away from Prague, facilitating flexible on-site participation for CVUT engineers during the design, development and modification phases.

During the operational phase, BBA can also provide additional or substitute persons as required at short notice, mitigating schedule risks associated with personnel.

BBA will employ 'ProjectLibre' Project management software for planning, communication and alignment with CVUT practices.

BBA has defined a Manpower Schedule and required facilities are available at BBA, Berlin Schönefeld to fulfill the schedule as defined in the Table 6.1.

The structure of the engineering team meeting the requirements per XIV.2 of Annex 3 Contract of Work is presented in Table 6.2.

Figure 6.1 shows the engineering team organization chart.





Task	Timing	Туре
Estimated Project Start	15-Sep-2017	Milestone
Identification of Key Personnel names, including project manager, and engineering leader	15-Sep-2017	Deliverable
Delivery of a detailed milestone plan	15-Sep-2017	Deliverable
Receipt of Aircraft	15 Oct-2017	Milestone
Preliminary Design Review	1-Nov-2017	Deliverable
Detail Aircraft Modification Design Documents and drawings	1-March-2018	Milestone
Data Acquisition System Design Specifications with sufficient documentation	1-March-2018	Milestone
Part M / Part 145 approval for the modified experimental aircraft	1-May-2018	Milestone
Aircraft Modifications Complete and ready to accept engine	1-June-2018	Milestone
Aircraft Operation Manuals Completed Consistent with alternate engine configuration	1-July-2018	Deliverable
EASA Permit to Fly with test engine	1-July-2018	Milestone
Technical Review with CVUT to substantiate flight readiness	1-July-2018	Deliverable
Engine installation and instrumentation connections to data acquisition system	1-August-2018	Deliverable
First Flight in Czech Republic	1-September-2018	Deliverable
Completion of 150 hours of flight testing with data acquisition and transmission of data	31-Dec-2018	Deliverable
Completion of 180 hours of flight testing with data acquisition and transmission of data	30-June-2019	Deliverable
Modified Aircraft delivery to the CVUT (transfer of the ownership)	per Section 6.3 Contract on Work	Deliverable

**Table 6.1: Schedule and Deliverables** 





Position	Identified Person	Contact Details
Project Manager		
Electrical Engineering Team Lead		
Control Systems Engineering Leader		
Mechanical Engineering Leader		
Flight Test Engineering Leader		
Instrumentation and Data Acquisition Engineering Leader		
Procurement and Sourcing Leader		
Head of Airworthiness		
Test Pilot Approved to Fly the Supplier Selected Experimental Aircraft		
Aircraft Maintenance Leader with Part 145 Approval		

**Table 6.2: List of Key Personnel** 





Figure 6.1: Engineering Organization Chart





## **TENDER DOCUMENTATION**

for a public procurement procedure for supplies in above-the-limit regime to be contracted in open proceedings

pursuant to Sec 56 Act No. 134/2016 Coll., on Public Procurement (hereinafter the "PPA")

## Flying test bed - Round 2

This tender documentation ("**Documentation**") has been prepared in accordance with Sec 28 (1) letter b) PPA and represents a set of terms and conditions in level of detail that is sufficient to submit a bid in the tender ("**Bid**"), except for forms pursuant to Section 212 PPA. The rights and obligations of the Contracting Authority and bidders, respectively participants in the tendering procedure (hereinafter, for the purposes of this Documentation, only "**Supplier(s)**") within this procedure which are not expressly stipulated herein shall be governed by relevant provisions of the PPA.

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# 1 Basic information about the Public contract

Contracting Authority:	České vysoké učení technické v Praze, fakulta strojní Registered seat: Technická 1902/4, 166 07 Praha 6, Dejvice ID number: 68407700 Represented by: Prof. Ing. Michael Valášek, DrSc., dean (hereinafter the "Contracting Authority")
Contracting Authority's Attorney pursuant to Sec 43 PPA:	HOLEC, ZUSKA & Partneři, sdružení advokátů  Palác Anděl, Radlická 1c/3185, 150 00 Praha 5  ID number: 662 31 051, Tax number: CZ 5912220776  Represented by: JUDr. Karel Zuska, partner  Contact person:  e-mail: tel.: fax: (hereinafter the "Attorney").
Process:	public procurements procedure for supplies (hereinafter the " <i>Public Contract</i> ") in above-the-limit regime to be contracted in open proceedings
CPV code:	34700000-4 Aircraft and spacecraft
Name of the Public contract:	Flying test bed – Round 2
Availability of Documentation pursuant to Sec 96 PPA	Documentation has been published at the Contracting Authority's website profile in full extent
Bid submission deadline:	In accordance with the published notification on the public contract ("Notification").

## 2 Purpose of the Public contract

The Contracting Authority is a public university and recipient of funding provided by the Ministry of Education, Youth and Sports of the Czech Republic for the Project "Research infrastructure for aviation and space Technology", Reg. No. CZ.02.1.01/0.0/0.0/16\_017/0002620, granted within the framework of the Operational Program Research, Development and Education (hereinafter "*OP RDE*"; hereinafter the "*Project*").

The flying test bed shall be used to carry out research within the framework of grant programmes, collaborative research projects, contract research, dissertations of post-graduate students and other research projects.

The flying test bed will allow the Contracting Authority to participate in grant competitions, research projects with industrial partners and formulate themes for post-graduate theses.

The objective of the procurement procedure for this Public Contract is to conclude a public contract between the Contracting Authority and the selected Supplier.

# 3 Subject of the Public contract

## 3.1 General scope of the Public contract

The scope of the Public contract is following:

- a) Selection and procurement of an aircraft capable of achieving test objectives of a test turboprop engine, with necessary aircraft modifications;
- b) Design of a modification of an aircraft to interface with a test turboprop engine, including accommodating instrumentation requirements;
- c) Execution of physical modification of a flying test bed platform to replace one existing engine with a different model, instrumented turboprop engine;
- d) Design, procurement, and installation of a data acquisition system;
- e) Obtain EASA permit to fly for the modified aircraft with the test engine in Czech Republic. The aircraft shall be registered in the Czech Republic.
- f) Installation of the Contracting Authority supplied instrumented test engine, and connection of instrumentation leads;
- g) Flight test operations of up to 180 flight test hours in the Czech Republic between Sept 1, 2018 and June 30, 2019.
- h) Line level maintenance as necessary and as defined by the corresponding manuals for aircraft, aircraft avionics, legacy propeller and legacy engine till June 30, 2019.

## 3.1.1 Specification of the Public contract

Details concerning performance are provided in Technical Specification, which is attached as *Annex No. 4* hereto to the Contract for Work ("*Contract*"), which is also attached hereto as *Annex No. 3*.

#### 3.1.2 Reserved changes

The Contracting Authority reserves the right to make the following changes to the commitment entered into in the Contract within the meaning of Sec 100 PPA, in order to maintain economy and observe the principle of fairness in commercial relationships:

- a) The Contracting Authority shall be entitled <u>not to</u> take delivery of all the supplies and services, whose price has been set 'per unit', as the Contracting Authority cannot objectively estimate the precise extent of its research needs. Supplier shall not have the right to seek any compensation for the reason that the Contracting Authority will not take delivery the entire contracted volume of supplies or services;
- b) The Contracting Authority reserves the right to use negotiated procedure without publication pursuant to Sec 66 PPA in order to contract for additional services consisting of 'Line maintenance incl. all time and material,' for the period between 1 July 2019 and 30 June 2027, i.e. over these 96 calendar months. The Contracting Authority shall be entitled to order only a certain part of these services, according to its actual needs. The estimated value shall be 600.000,- EUR;
- c) The Contracting Authority reserves the right to use negotiated procedure without publication pursuant to Sec 66 PPA in order to contract for additional services consisting of 'Flight testing operations', for the period between 1 July 2019 and 30 June 2027, in the extent of 50 flight hours for two pilots annually. The Contracting Authority je shall be entitled to order only a certain part of these services, according to its actual needs. The estimated value shall be 260.000,- EUR;
- d) The Contracting Authority reserves the right to use negotiated procedure without publication pursuant to Sec 66 PPA in order to contract for additional services consisting of 'Flight Test Engineer,' for the period between 1 July 2019 and 30 June 2027, in the extent of 50 hours for two engineers annually. The Contracting Authority je shall be entitled to order only a certain part of these services, according to its actual needs. The estimated value shall be 95.000,- EUR.

The prices for parts of the contract corresponding to the reserved changes described in paragraphs b) to d) shall be specified by Supplier in the *Annex No. 6*. "Quotation template" – part "Option". This part of the price shall serve as the base value for potential negotiated procedures without publication.

#### 3.1.3 Parts of the Public Contract

This Public Contract is not divided into individual parts.

The reason for this Public Contract not being divided into parts is the fact that the subject of the Public Contract represents a homogenous whole lacking any classification by individual domains; the Contracting Authority anticipates that the complete subject of the Public Contract will be executed fully by one single Supplier meeting the terms and conditions hereof. The selected Supplier shall be responsible for selection of the aircraft, design of its modifications, execution of modifications and testing thereof in the extent of 180 hours.

## 4 Place and Time for Performance of the Public Contract

The place of performance of the Public Contract shall be defined as the Czech Republic and for any communication purposes as the seat of the Contracting Authority.

Anticipated time of execution: September 2017 – 30 June 2019

The Contract execution date depends on the completion of the tendering procedure.

# 5 Suppliers' Qualification

#### 5.1 Fulfilment of Qualification Criteria

Suppliers need to meet requirements relating to qualification as defined in Sec 73 *et seq* PPA. Suppliers shall demonstrate that they meet these qualification requirements in the manner and extent specified herein.

Qualification requirements for this Public Contract shall be met by Suppliers who will duly demonstrate the following in their Bid:

- a) Basic qualification pursuant to Sec 74 PPA;
- b) Professional qualification pursuant to Sec 77 PPA;
- c) Economic qualification criteria pursuant to 78 PPA;
- d) Technical qualification criteria pursuant to Sec 79 PPA.

## 5.2 Authenticity and age of documents proving qualification

## 5.2.1 Authenticity

Documents to be provided by Suppliers to demonstrate their qualification may be submitted in simple copies (pursuant to Sec 45 (1) PPA); the Contracting Authority will allow that Suppliers substitute, in accordance with Sec 86 (2) PPA, affidavits in place of documents where applicable.

Suppliers providing affidavits in place of documents shall make sure that such affidavits are duly signed by statutory representatives of the Supplier or, if signed by another person, Suppliers shall demonstrate that such other person has been duly authorized to take such legal acts, which demonstrates the Supplier's qualification.

The Contracting Authority shall require, in accordance with Sec 86 (3) PPA, that the selected Supplier submits, prior to executing the Contract hereunder, originals / notarized copies of documents demonstrating Supplier's qualification.

## 5.2.2 Age

Documentation demonstrating basic qualification pursuant to Sec 74 and professional qualification pursuant to Sec 77 (1) shall demonstrate fulfilment of the required qualification criterion no later than 3 months prior to the commence of the tender proceeding.

#### 5.3 Demonstrating Suppliers' qualifications – foreign entities

In case the required qualification is obtained abroad, it shall be demonstrated by documents issued in accordance with the law of such country, where it has been obtained, in the extent required by the Contracting Authority.

## 5.4 Basic qualification

#### **5.4.1** Extent

Suppliers who (within the meaning of Sec 74 (1) PPA)

- a) have been, in the last 5 years prior to commencement of this tendering procedure, finally convicted of a criminal offence listed in Annex No. 3 to PPA or similar criminal offence(s) under the laws of the Supplier's headquarters country; sentences that had already been struck will not be considered;
- b) have, in the Czech Republic or country of its headquarters, payable tax arrears (outstanding unpaid tax);
- c) have, in the Czech Republic or country of its headquarters, payable insurance arrears or sanction(s) relating to public health insurance,
- d) have, in the Czech Republic or country of its headquarters, payable social security insurance arrears or sanction(s) relating to social security insurance or contributions toward the state employment policy,
- e) are in liquidation, or subject to insolvency, bankruptcy, under forced administration (receivership) in accordance with other legal regulation or in similar situation according to the laws of the country where headquartered

WILL BE DEEMED TO HAVE BEEN DISQUALIFIED HEREFROM.

If the Supplier is a legal entity, the conditions imposed by Sec 74 (1) letter a) PPA shall be met by the legal entity <u>and each</u> member of its statutory body. Should a legal entity be a member of the Supplier's statutory body, the conditions imposed by Sec 74 (1) letter a) PPA shall be met by such legal entity,

- a) and each member of its own statutory body, and
- b) by the person representing this legal entity within the statutory body of the Supplier.

Should the participant in the tendering procedure be a branch of an enterprise

- a) of a foreign legal entity, the conditions imposed by Sec 74 (1) letter a) PPA shall be met by the legal entity <u>and</u> the manager of the branch of such enterprise,
- b) Czech legal entity, the conditions imposed by Sec 74 (1) letter a) PPA shall be met by persons listed in Sec 74 (2) PPA and the manager of the branch of such enterprise.

## 5.4.2 Demonstration of basic qualification

Suppliers demonstrate their fulfilment of basic qualifications under paragraph 5.4.1. above in relation to the Czech Republic by submitting:

- a) Extract from the Criminal Register in relation to Sec 74 (1) letter a),
- b) confirmation from the locally competent financial authority in relation to Sec 74 (1) letter b),
- c) written affidavit in relation to consumption tax as per Sec 74 (1) letter b),
- d) written affidavit in relation to Sec 74 (1) letter c),
- e) confirmation from the district social security administration in relation to Sec 74 (1) letter d),
- f) extract from the Commercial Registry or by affidavit in writing in case the person has not been registered with the Commercial Registry, in relation to Sec 74 (1) letter e).

Suppliers may use the template affidavit attached hereto as Annex No. 1.

If the Supplier is a person headquartered abroad, it shall demonstrate meeting basic qualification with respect to letter a) above only in relation to the country where it has its headquarters.

## 5.5 Professional qualification

Supplier shall demonstration its professional qualification in relation to the Czech Republic by submitting an **extract from the Commercial Registry** or similar registry, if the law requires such registration.

The Contracting Authority will also require, within the meaning of Sec 77 (2) PPA, that Suppliers submit documentation that demonstrates that they are holders of:

- a) EASA PART M valid for the selected aircraft valid for at least last 5 calendar years
- b) EASA PART 145
- c) EASA PART 21J relevant to the selected aircraft

Documentation demonstrating professional qualification of Suppliers may not be submitted if the laws in the country where such Supplier is headquartered do not require similar professional qualification.

## 5.6 Economic qualification

The Contracting Authority requires that the minimum annual turnover of the Supplier for the last 3 accounting periods prior to commencement of the tendering procedure amounted to at least 5 mil. EUR in each such accounting period.

If the Supplier came into existence at a later date, it shall submit information concerning its turnover (and compliance with the required limit) for all accounting period from the date or its formation.

Suppliers shall demonstrate the turnover by **Profit and Loss Statement** or similar document, according to the laws of the country where the Supplier is headquartered.

Should the Supplier demonstrate its economic qualification through a third person, the Contracting Authority requires that the Supplier and such other person, demonstrating economic qualification on behalf of the Supplier, be jointly and severally liable for the performance to be provided in the Public Contract.

This fact shall be demonstrated by the Supplier in a manner defined in Art. 5.8. of the Documentation.

## 5.7 Technical qualification

## 5.7.1 List of important deliveries

The Contracting Authority will require that Suppliers submit a **List of Important Deliveries** (LID) provided in the last 5 years prior to commencement of this tendering procedure including the price thereof and period when provided, along with identification of the client.

The Contracting Authority will allow that Suppliers list those deliveries that may have not yet been completed, but the Supplier already complete a part of such delivery, which meets the definition of an important delivery provided below.

#### 5.7.2 Minimum LID requirements

The Contracting Authority requires that Supplier provide LID listing at least **2 important deliveries**. Important delivery shall be understood as:

- a) Successfully obtaining EASA permit to fly for a modified aircraft
- b) Completing a minimum of 15 test flight hours on a modified aircraft in an experimental mode and/or after approved Supplement Type Certificate (STC) by EASA
- c) Completion of a minimum of one (1) aircraft modification projects involving airframe structural modification and Data Acquisition System development and installation
- d) Completion of a minimum of one (1) aircraft modification project involving aircraft avionics or control system interface

Note: One important delivery may demonstrate more than one of the above listed conditions, but the list needs to comply with the total number of important deliveries required.

#### 5.7.3 Conflict of Interest

In the event it is demonstrated that the Supplier has a conflict of interest, which could negatively affect performance of the Public Contract, the Contracting Authority may, pursuant to Sec 79 (1) PPA, deem the technical qualification not duly demonstrated.

## 5.8 Demonstrating qualification through other persons (Sec 83 PPA)

Suppliers may demonstrate certain parts of their economic qualification, technical qualification or professional qualification, with the exception of criterion as per Sec 77 (1) PPA, though other person(s). Suppliers shall be in such cases required to provide the Contracting Authority with the following documentation:

- a) documentation demonstrating fulfilment of professional qualification pursuant to Sec 77 (1) by another,
- b) documentation demonstrating fulfilment of the missing part of the qualification by another person,
- c) documentation demonstrating fulfilment of the basic qualification pursuant to Sec 74 by another person, and
- d) a commitment certified by such another person in writing to provide performance intended for the Public Contract or to provide assets or rights with which the Supplier will be authorized to dispose during execution of the Public Contract, at least in the extent, in which such another person demonstrated its qualification on behalf of the Supplier. This requirement will be deemed to have been met, if the written commitment of another person includes joint and several liability of this person for the performance of the Public Contract along with Supplier. Should a Supplier demonstrate qualification through another person, and submit documentation pursuant to Sec 79 (2) letter b) or d) PPA relating to such person, the commitment in writing made out by such person shall also include, that such person shall perform those services that are directly related to the qualification criterion it demonstrated.

## 5.9 List of Qualified Suppliers

Suppliers may demonstrate their qualifications by presenting a certificate from the List of Qualified Suppliers, in the manner and extent required in Sec 228 at seq PPA.

## 5.10 Certified Suppliers System

Suppliers may demonstrate their qualifications by presenting a certificate from the approved system of certified suppliers, in the manner and extent required in Sec 233 *at seq* PPA.

## 5.11 Changes in Suppliers Qualification

Should the Suppliers' qualification change, after the documentation or affidavits demonstrating qualification had already been submitted in the tendering procedure, Suppliers shall be obliged to notify such change to the Contracting Authority within do 5 business days thereof, and submit, within 10 business days from notification, new documentation of affidavits concerning such changed qualification.

## 6 Bid language

Bids may be prepared in the **Czech or English language** in line with the Contracting Authority requirements stipulated herein and in the PPA; this requirement does not apply to documents submitted within the Bid outside the Contracting Authority's requirements (e.g. additional publicity information).

Should the PPA or the Contracting Authority require submission of document according to the laws of the Czech Republic, Suppliers may submit similar document according to the laws of the country, where such document is being issued; such foreign documents shall be submitted along with their translation into Czech. Should the Contracting Authority have doubt about the correctness of the translation, it may request that an official translation is procured using a qualified translator into the Czech language who is registered on the list of authorized translator and interpreters. Documents in Slovak and education certificates (diplomas etc.) in Latin may be submitted without translation. Should the requested document not be issued under the laws of the 'issuing' country, it may be substituted by an affidavit.

## 7 Recommended method of preparation and form of the Bid

# 7.1 Recommendations relating to structure, contents and preparation of the Bid, incl. documents relating to qualification

#### 7.1.1 Bid structure

The Contracting Authority requires that the Bid is structured as follows:

- a) Cover Letter according to Annex No. 2 hereto;
- b) Bid Contents;
- c) Power of Attorney for the person authorized by the Supplier's statutory representative to act and sign on behalf of the Supplier (where applicable);
- d) documentation demonstrating fulfilment of basic qualification;
- e) documentation demonstrating fulfilment of professional qualification;
- f) documentation demonstrating criteria relating to economic qualification;
- g) documentation demonstrating criteria relating to technical qualification;
- h) technical part of the Supplier's Bid prepared in the format of *Annex No. 5* Supplier response template (technical part);
- i) Bid price structure in accordance with guidelines stipulated in Art. 11 hereof;
- j) Duly signed draft Contract with all pertinent data filled in (draft Contract shall b signed by the person who is authorized to act and sign on the Supplier's behalf in accordance with method of signing designated in the Commercial Registry extract or by a representative, who has been duly empowered for such legal act according to valid law); this draft shall fully comply with terms and conditions stipulated herein *Annex No. 3*; the Contract shall be accompanied with all requested Annexes;
- k) CD / USB disc containing the Bid in its entirety in electronic form.

## 7.1.2 Recommended formal requirements for the Bid

a) The Bid shall be submitted in one (1) hardcopy original and one (1) copy;

- b) Original hardcopy of the Bid shall be denoted with the words "ORIGINAL" in the upper right hand corner of the overleaf. Copy of the Bid shall be denoted with the words "COPY" in the upper right hand corner of the overleaf; the Bid shall also contain a CD containing an electronic copy of the Bid; the electronic copy shall be true and complete copy of the Bid (for instance in the PDF format). The electronic version of the Bid on CD shall be produced using only generally known and available means including generally used software (such as Excel, Word), in a version that is currently in general use i.e. OS Windows 7 or 10 and similar etc.;
- c) The Bid shall be clearly printed and legible without errors, corrections and other discrepancies which could mislead the Contracting Authority;
- d) The Bid shall be secured against tampering and removal of individual sheets, i.e. secured by binding / string / seal with the ends taped over and stamped and signed by authorized person. If the Bid is submitted in binder or similar, the sheets shall be secured against tampering but allow free browsing;
- e) All sheets within the Bid should carry page numbers in uninterrupted series, starting with 1 on the overleaf / cover sheet. Should the Supplier insert into the Bid any separate document, which is already separately page-numbered, the Supplier shall number these pages again using the numerical sequence used for the entire Bid;
- f) Suppliers shall submit the Bid in the required number of copies, in one closed, non-transparent and undamaged sealed envelope or similar packaging in a manner stipulated in Art. 11 hereof. Should the Bid be too large for one envelope / box, each envelope or box shall carry its number / total number of envelopes / packages comprising the Bid.

## 7.2 **Joint Bid Requirements**

Joint Bid is a bid submitted by more than one Supplier together. In such a case, the Suppliers submitting such joint bid shall be considered to constitute one Supplier.

Submission of a joint Bid shall be considered to constitute a joint commitment of all involved Suppliers, with such Suppliers being liable, according to Sec 1874 Act No. 89/2012 Coll., Civil Code, as amended, jointly and severally.

## 8 Tender Documentation Clarification

Suppliers may request in writing that the Contracting Authority provides clarification to this Documentation (by e-mail, post or personal delivery).

All clarifications issued shall be published at the Contracting Authority's web profile.

Clarification requests shall be submitted in the Czech or English language to the Attorney (Art. 1 hereof). Clarification requests shall be delivered in line with Sec 98 (3) PPA no later than 8 business days prior to the Bid submission deadline.

Clarifications shall be distributed and published at the Contracting Authority's web profile in line with Sec 98 (4) PPA within 3 business day from receipt of the request.

The Contracting Authority may provide clarifications to Suppliers without receiving specific requests where it feels such clarification may be necessary. The Contracting Authority shall publish / distribute such clarification no later than within 5 business days prior to the Bid submission deadline.

## 9 Manner, time and place for Bid submissions

Supplier shall submit its Bid **in writing** in one sealed envelope (box / package) as follows:

All submitted and properly sealed envelopes (boxes / packages) containing Suppliers' Bids shall bear the name of the Supplier at the front upper left corner of the Bid and be marked with the name of the tender procedure: "Flying test bed – Round 2" and the word "DO NOT OPEN". The envelope / package shall be sealed with a stamp and signed by authorized person. The postal address of the place of delivery / addressee (i.e. the Attorney's offices), shall be provided in the lower right hand corner. Bids shall be delivered to the address of the Attorney specified in Art. 1 hereof.

The deadline for Bid submissions shall be specified in the Notification (hereinafter the "Deadline").

The decisive moment / time for the submission of the Bid shall be the time when the Attorney takes receipt of the Bid at his offices.

## 10 Bid opening: Date, place and procedure

Bids shall be opened in the date specified in the Notification.

Bid opening may be attended by representatives of those Suppliers who have duly delivered their Bids prior to the Deadline. Due to organizational reasons, the number of representatives who may attend the opening will be limited to one representative per Supplier. The Contracting Authority shall require that each representative submits a power of attorney and an extract from the Commercial Registry or similar document, showing composition of the Supplier's statutory body. Should the opening be attended by the member of the Supplier's statutory body, the extract from the Commercial Registry or similar document and identification document will suffice; identification document will be required also for Suppliers – natural persons.

#### 11 Structure of the Bid Price

Suppliers shall specify the Bid price on a separate sheet within the Bid; the price shall be specified as the total price for execution of the subject-matter of the Public Contract and shall follow the structure provided in Annex No. 6 – Quotation template. Suppliers shall not be authorized to execute any changes to the Annexed template.

#### 12 Evaluation

The fundamental criterion for evaluation Bids will be what constitutes the most economically advantageous Bid.

The evaluation will include the following partial evaluation criteria:

	Partial criterion	Weight
1.	Total price in EUR excluding VAT	55 %
2.	Technical level and quality	45 %

## 12.1 Total price in EUR excluding VAT

The total price excluding VAT will be automatically calculated by a MS Excel spreadsheet that is appended to this Documentation as the 'Quotation template', once relevant cells are filled in by Suppliers. Value marked "TOTAL PRICE" will be evaluated.

The Bid price shall be quoted as the fixed price, not subject to any adjustment whatsoever during the entire term of the Contract. The total Bid price shall be specified as the maximum acceptable price including all associated costs and fees and shall include all costs relating to the execution of the Public Contract under the terms and conditions defined in the binding draft of the Contract.

## 12.2 Technical level and quality

The Contracting Authority shall evaluate the 'Technical level and quality', on the basis of the submitted Supplier's "response template".

The Contracting Authority shall evaluate each submitted Bid using criteria specified in Annex No. 7 hereto (Technical evaluation template), which also define individual levels of fulfilment of the Contracting Authority's requirements (Scoring criteria).

Criteria marked "Comply" represent the minimum requirements defined by the Contracting Authority and any failure to meet these shall lead to the exclusion of the Supplier's Bid in its entirety.

#### 12.3 Evaluation method

Bid shall be evaluated according to partial evaluation criteria and their respective weight. Evaluation committee shall evaluate Bids according to the above partial criteria and their weight using a point system and assigning points between 0 and 100 points. Each Bid shall be assigned points reflecting it success within each specific partial criterion.

For the numerically expressed partial criterion (Bid price), where the most suitable Bid shall have the minimum value, each Bid shall be assigned a point value, which shall be calculated by multiplying the ratio between the value of the most suitable Bid and the Bid being evaluated by 100 and the weight of the given criterion:

Most suitable Bid

Number of = 
$$100 x$$
-----x 55%

points Bid being evaluated

For the partial criterion, which cannot be expressed numerically (Technical level and quality), the Evaluation committee shall order the Bids as follows: Evaluation committee shall assign points to each Bid according to the evaluation template, as attached hereto in *Annex No. 7* - Technical evaluation template.

Number of = assigned number of points 
$$x = 45\%$$

**The total evaluation** represents the sum of point evaluations assigned for each partial criterion. The best Bid shall be the Bid, which receives the most points.

Evaluation committee shall not perform evaluation, if only one Bid by one Supplier is submitted.

Evaluation committee shall prepare a report on the Bid evaluation, which shall form a part of the notification on the selection of the Supplier within the meaning of Sec 123 PPA.

#### 13 Commercial and other terms

Commercial and other terms within the meaning of Sec 37 (1) letter c) PPA, defining the future framework for the contractual relationship between the Contracting Authority and the selected Supplier, have been stipulated in detail in the binding draft of the Contract, which is attached hereto as *Annex No. 3*.

Suppliers shall fill in the required information into this binding draft Contract (their own identification information, information relating to evaluation criteria and other data as may be highlighted throughout the text of the draft Contract). The resulting filled-in binding draft shall be then submitted as their own draft Contract. The draft Contract shall be duly signed by person(s) duly authorized by the Supplier to act and sign on its behalf.

Suppliers shall not be authorized to amend or modify the text of the draft Contract with the exception of information that they are required to fill in. Should a Supplier amend or modify any part of the Contract, which the Contracting Authority did not authorize, or enters information that

are contrary to the Contracting Authority's requirements, the Bid shall be considered to have failed to comply with tendering terms and conditions.

## 14 Exceptionally Low Bid price

The Contracting Authority shall evaluate whether the prices offered constitute an especially low Bid price prior to distributing notification on the selection of the Supplier.

In the event an exceptionally low Bid price is indentified, the Contracting Authority shall request the Supplier to justify the method of arriving at such price in writing and proceed pursuant to Sec 113 PPA.

## 15 Communication between the Contracting Authority and Suppliers

No communication between the Contracting Authority Suppliers may prejudice confidentiality of Bids or completeness of the information contained therein. The Contracting Authority shall not be allowed to access the Bids' contents before the deadline for their submission.

Documents exchanged pursuant to the PPA may be delivered in person, by courier service, by postal service operator licensed under a special law, by electronic means, via data box or otherwise.

The Contracting Authority requires, in order to maintain legal clarity of the tendering procedure, that all communication with the Contracting Authority is conducted solely and exclusively in writing. Any other methods of communication, e.g. personal meetings, telephone conferences etc., shall be excluded except as expressly regulated in a statutory procedure. All acts by the Contracting Authority towards Suppliers or acts by Suppliers toward the Contracting Authority within the tender procedure shall be in writing. Acts toward the Contracting Authority shall be delivered to the Attorney referred to in Art 1 of this Documentation.

In the case of personal deliveries, deliveries by post or courier, the delivery / receipt shall be deemed to be the moment when the addressee takes physical receipt of the document. When communicating by means of a data box, document shall be deemed to have been delivered by delivery into the addressee's data box.

If a Bid is submitted by more Suppliers jointly, they are required to state in their Bid what is their joint delivery address for any correspondence with the Contracting Authority. Transmission of any documents to this joint address shall constitute a proper delivery to all participants in the joint Bid. The Contracting Authority has however reserves the right to send documents to each Supplier party to a joint Bid separately.

## 16 Other

## 16.1 The rights of the Contracting Authority

The Contracting Authority reserves the following rights and conditions:

- a) Given the nature of the subject-matter of the Public Contract, the Contracting Authority will not allow alternative Bid pursuant to Sec 102 PPA;
- b) The Contracting Authority reserves the right to postpone the commencement date of the Public Contract in connection with actual completion date for this tendering procedure;
- c) The Contracting Authority shall not make any payment to Suppliers in connection with their participation herein;
- d) The Contracting Authority may perform evaluation of fulfilment of conditions relating to participation in the tender prior to Bid evaluation or after the Bid evaluation process.

#### 16.2 Binding nature of the Contracting Authority's requirements

The information and data stipulated bevy the Contracting Authority in various parts of the tender Documentation constitute mandatory requirements. Each Supplier shall be obliged to fully and unconditionally respect these requirements when processing their respective Bids. Non-acceptance of the Contracting Authority requirements specified in the tender Documentation may constitute failure to fulfil tender terms and conditions.

#### 16.3 Additional conditions before conclusion of the Contract

The selected Supplier, who is a legal entity, shall be obliged to submit the following information prior to concluding the Contract:

- a) Identification information for all persons who are the actual owners of the legal entity, pursuant to the Act on certain measures combating legalization of proceeds of crime and financing of terrorism,
- b) Documentation which document the relationship of all persons under letter a) above to the Supplier; this documentation includes but is not limited to:
  - a. Extract from the Commercial Registry or other similar registry,
  - b. List of shareholders,
  - c. Decision of the statutory body on distribution of profits,
  - d. Articles of association, bylaws or Founder's Deed.

#### 16.4 Confidentiality

Suppliers shall be obliged to treat all information that will be provided to them during the tender procedure period as strictly confidential (except for information that were published). Suppliers shall be obliged to refrain from any acts that might disrupt the transparent and non-discriminatory conduct of the procurement procedure, in particular any actions that could result in a distortion of competition between Suppliers within this Public Contract tendering procedure.

Should parties hereto exchange any information identified as confidential with each other during the Contract negotiations, the receiving party to which the information was provided shall not disclose such information to any third party, nor use it contrary to their purpose for its own needs, regardless of whether the Contract is eventually concluded or not. The party breaching this duty

shall be liable to pay damages, in accordance, by analogy, with Sec 2913 Act no. 89/2012 Coll., Civil Code.

#### 16.5 Site inspection

There will be no site inspections.

#### 16.6 Tender period

The Contracting Authority defines the tender period in the length of 4 months. Suppliers may not withdraw from the tender procedure during this period. Tender period does not run for the period of time when the Contracting Authority is prevented from entering into the Contract pursuant to Sec 246 PPA.

## 16.7 Preparation of the tender terms and conditions

These terms and conditions were not prepared by any persons outside the Contracting Authority. Preliminary market consultations in order to predetermine certain characteristics of the Public contract and to clarify some aspects of the procurement procedure took place with GE Aviation Czech s.r.o. ID number 27928845, registered seat Praha 9, Beranových 65, PSČ 19902, prior to procurement procedure's commencement. Preliminary market consultation enabled the

Contracting Authority to perform a market survey prior to tendering in areas of:

a) Defining the technical specification (functional or performance-based requirements) and life cycle costing and assessment of what the maker can offer in terms of technical solutions – *Technical specification* 

b) the extent and focus of the technical and price assessment of the contract in the Tender documentation *Quotation template* and *Technical evaluation template*.

#### Annexes:

*Annex No. 1 – Template affidavit;* 

Annex No. 2 – Cover sheet;

Annex No. 3 – Draft Contract to execute the Public Contract;

Annex No. 4 – Technical specification;

Annex No. 5 – Supplier response template (technical part);

Annex No. 6 - Quotation template;

Annex No. 7 – Technical evaluation template.

In Prague on 4<sup>th</sup> July 2017

Prof. Ing. Michael Valášek, DrSc., dean