

From: on behalf of COMNAVAIRSYSCOM PATUXENT RIVER MD(uc)
To: COMNAVAIRFOR SAN DIEGO CA
Cc: CG I MEF(uc); CG II MEF(uc); CG III MEF(uc); CG 1ST MAW(uc); CG 2ND MAW(uc); CG 3RD MAW(uc); CG 4TH MAW(uc); CG MCCDC QUANTICO VA CCID(uc); CG MCCDC QUANTICO VA(uc); CG TECOM QUANTICO VA(uc); CG TECOM ATB(uc); CG TECOM GTB(uc); CMC WASHINGTON DC AVN APP(uc); CMC WASHINGTON DC AVN APC(uc); CMC WASHINGTON DC AVN APW(uc); CMC WASHINGTON DC AVN ASL(uc); CMC WASHINGTON DC AVN ASM(uc); CMC WASHINGTON DC AVN(uc); COMMARCORSYSCOM QUANTICO VA(uc); COMMARFORCOM G3-5-7(uc); COMMARFORCOM G-1(uc); COMMARFORCOM G-2(uc); COMMARFORCOM(uc); COMMARFORPAC G1(uc); COMMARFORPAC G2(uc); COMMARFORPAC G3(uc); COMMARFORPAC(uc); COMMARFORRES G1(uc); COMMARFORRES G2(uc); COMMARFORRES G3(uc); COMMARFORRES(uc); COMMARFORSOC G1(uc); COMMARFORSOC G2(uc); COMMARFORSOC G3(uc); COMMARFORSOC(uc); COMNAVAIRFORES SAN DIEGO CA(uc); COMNAVAIRSYSCOM PATUXENT RIVER MD(uc); MACG 18(uc); MACG 28(uc); MACG 38(uc); MACG 48(uc); VMU1(uc); VMU 2(uc); VMU3(uc)
Subject: P262011Z FEB 10 UAS SOF IFC REVISION FOR RQ-7B VMU-2 TRANSITION TRAINING AT CHERRY POINT

PASS TO OFFICE CODES:

COMNAVAIRSYSCOM PATUXENT RIVER MD//5.0D/4.0P//
COMNAVAIRFOR SAN DIEGO CA//N421D/N3//
COMMARFORPAC//ALD/G3//
CG 3RD MAW//ALD/G3//
MACG 38//G3//
VMU1//S3/MO//
CMC WASHINGTON DC AVN//APX//
SECINFO/U/-//
MSGID/GENADMIN,USMTF,2008/NAVAIRSYSCOM AIR-4.0P//
SUBJ/UAS SOF IFC REVISION FOR RQ-7B VMU-2 TRANSITION TRAINING AT /CHERRY POINT//
REF/A/DESC:DOC/NAVAIR/160804ZFEB2010//
REF/B/MSGID:GENADMIN/NAVAIR/172013ZJUN2009//
REF/C/DESC:DOC/USA/27MAY2009//
REF/D/DESC:DOC/USA/01OCT2009//
REF/E/DESC:DOC/USA/01OCT2009//
REF/F/DESC:DOC/USA/22OCT2004//
REF/G/DESC:DOC/USA/01OCT2009//
REF/H/DESC:DOC/USMC/01JAN2009//
REF/I/DESC:DOC/USAF, USN, USA/02FEB2007//
REF/J/DESC:EML/COMNAVAIRLANT/26FEB2010//
REF/K/DESC:NAVAIRINST 13034.1C/COMNAVAIRSYSCOM/28SEP2004//
NARR/REF A IS THE SUBJECT FLIGHT CLEARANCE REQUEST.
REF B IS THE PREVIOUS UAS SOF IFC FOR RQ-7B VMU-2 TRANSITION TRAINING AT CHERRY POINT .
REF C IS THE AIRWORTHINESS RELEASE (AWR), FOR OPERATION OF RQ-7B SHADOW UNMANNED AIRCRAFT SYSTEM (UAS) (AWR RQ-7B20070620R1) (TN 70590).
REF D IS THE US ARMY SHADOW 200 OPERATORS MANUAL, TECH MANUAL TM 1-1550-689-10 (VOLUMES 1&2).
REF E IS THE US ARMY SHADOW 200 MAINTENANCE MANUAL, ORGANIZATIONAL AND DIRECT SUPPORT, TECH MANUAL TM 1 1550-689-23&P (IETM),
NAVY: A1-RQ7B-IETM .

REF F IS THE TECHNICAL MANUAL TM 9-5895-YYY-20P, REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) FOR SHADOW 200 TUAV SYSTEM, WITH UPDATE 14 APRIL 2009.

REF G IS THE US ARMY SHADOW 200 OPERATORS AND CREW MEMBERS CHECKLIST, TECH MANUAL TM 1-1550-689-CL.

REF H IS THE ATCFACO P3722.1 SERIES, MCAS CHERRY POINT AIR TRAFFIC CONTROL FACILITY MANUAL.

REF I IS THE TRI SERVICE MEMORANDUM OF AGREEMENT (MOA), MUTUAL ACCEPTANCE OF AIRWORTHINESS CERTIFICATION DATA.

REF J IS THE SHADOW STATEMENT OF EXPENDABILITY.

REF K IS THE FLIGHT CLEARANCE POLICY FOR AIR VEHICLES AND AIRCRAFT SYSTEMS.//

POC/RON LYLISTON/UAS FACILITATOR/UNIT:NAVAIRSYSCOM

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GENTEXT/REMARKS/1. IRT REF A, SAFETY OF FLIGHT (SOF)

INTERIM FLIGHT CLEARANCE (IFC) REVISION IS GRANTED FOR RQ-7B SHADOW OPERATIONS IN SUPPORT OF VMU-2 TRANSITION TRAINING AT MARINE CORP AIR STATION (MCAS) CHERRY POINT, NC AND SURROUNDING RESTRICTED AIRSPACES (R-5306). THE PURPOSE OF THIS FLIGHT CLEARANCE IS TO ALLOW VMU-2 TO CONDUCT TRAINING FLIGHTS ON THE SHADOW RQ-7B SYSTEM WITHIN THE COA AIRSPACE AT MCAS CHERRY POINT, NC AND THE R-5306 RESTRICTED AIRSPACES. THIS FLIGHT CLEARANCE ALSO SUPPORTS FAA COA APPLICATION FOR AIRSPACE AROUND MCAS CHERRY POINT, NC. REF B IS HEREBY CANCELLED AND SUPERSEDED. REVISIONS INCLUDE UPDATED REF C THROUGH H. THIS FLIGHT CLEARANCE IS SUBJECT TO THE FOLLOWING CONFIGURATION AND LIMITS.

2. TAKEOFF CONFIGURATION: BASELINE CONFIGURATION IAW REFS C THRU H.

3. LIMITATIONS: IAW REFS C THROUGH H.

4. SPECIAL WARNINGS, CAUTIONS AND NOTES: IAW REFS C THRU H AND THE FOLLOWING WHICH ARE REITERATED FOR EMPHASIS:

-----WARNING-----

A. THE RQ-7B SHADOW UAS HAS NOT COMPLETED FULL AIRWORTHINESS QUALIFICATION. ALL FLIGHT OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE EXPOSURE TO MANNED AIRCRAFT AND POPULATED GROUND AREAS.

-----WARNING-----

B. ACCIDENTAL OPERATION OF THE RQ-7B SHADOW UAS OUTSIDE OF RESTRICTED AIRSPACE, OR APPROVED COA AREA, SHALL BE IMMEDIATELY REPORTED TO AIR TRAFFIC CONTROL (ATC)/RANGE CONTROL. THE OPERATOR SHALL TAKE IMMEDIATE ACTIONS TO CORRECT THE FLIGHT PATH AND/OR FOLLOW ATC DIRECTION.

-----WARNING-----

C. THE RQ-7B SHADOW UAS HAS NOT UNDERGONE COMPLETE ELECTROMAGNETIC INTERFERENCE/ELECTROMAGNETIC COMPATIBILITY (EMI/EMC) TESTING. FLIGHT INTO HIGH INTENSITY EMI AREAS MAY RESULT IN ERRONEOUS DATA REPORTS AND/OR LOSS OF CONTROL OF AIRCRAFT. OPERATORS SHALL AVOID KNOWN HIGH INTENSITY EMI AREAS.

-----WARNING-----

D. THE RQ-7B SHADOW DOES NOT HAVE A SENSE AND AVOID SYSTEM. MID-AIR COLLISION IS A RISK. ALL FLIGHT OPERATIONS SHALL BE CONDUCTED TO ENSURE THAT MANNED AND UNMANNED AIRCRAFT SHALL NOT OCCUPY THE SAME AIRSPACE.

-----WARNING-----

E. THE RQ-7B SHADOW UAS HAS NOT UNDERGONE EXPLOSIVE ATMOSPHERE TESTING. A SERIOUS FIRE OR EXPLOSION MAY RESULT IF THE AIRCRAFT IS POWERED WHILE FLAMMABLE VAPORS ARE PRESENT DURING GROUND OR FLIGHT OPERATIONS. ADHERENCE TO PRECAUTIONS OF APPENDIX A OF REF C, SHALL BE OBSERVED IN ORDER TO ENSURE SAFE OPERATIONS.

-----WARNING-----

F. IN THE EVENT OF AN ENGINE FAILURE OR OTHER CATASTROPHIC FAILURE, LOCAL ATC/RANGE CONTROL AUTHORITY WILL BE NOTIFIED IMMEDIATELY AND THE AIRCRAFT SHALL BE DITCHED OVER THE RETURN HOME WAYPOINT. IF NOT POSSIBLE TO MAKE THE RETURN HOME WAYPOINT, EVERY EFFORT SHALL BE MADE TO VISUALLY INSPECT THE PROBABLE IMPACT AREA WITH THE PAYLOAD PRIOR TO PARACHUTE DEPLOYMENT.

-----WARNING-----

G. IF LOSS OF COMMUNICATIONS BETWEEN THE AIRCRAFT OPERATOR AND LOCAL ATC AUTHORITY/RANGE CONTROL OCCURS, THE AIRCRAFT SHALL BE DIRECTED TO THE RETURN HOME WAYPOINT.

-----CAUTION-----

H. MISSION PROFILES SHOULD BE PLANNED TO MINIMIZE FLIGHT OPERATIONS THAT ARE OUTSIDE OF THE 4:1 GLIDE RATIO TO RETURN HOME WAYPOINT. IF MISSION PLANNING IDENTIFIES OPERATIONS OUTSIDE THE 4:1 GLIDE SLOPE, ADDITIONAL DITCH POINTS SHALL BE IDENTIFIED, PLANNED AND BRIEFED DURING THE MISSION BRIEFING.

-----CAUTION-----

I. THE RQ-7B SHADOW UAS HAS NOT BEEN TESTED FOR THE EFFECTS OF LIGHTNING. FLIGHT OPERATIONS SHALL BE RESTRICTED TO NO LESS THAN 25 NAUTICAL MILES FROM LIGHTNING ACTIVITY.

-----NOTE-----

J. THE RQ-7B SHADOW UNMANNED AIRCRAFT SYSTEM (UAS) HAS NOT COMPLETED FULL AIRWORTHINESS QUALIFICATION TESTING. STRICT ADHERENCE TO AWR (REF C), OPERATORS MANUAL (REF D), TECH MAINTENANCE MANUALS (REFS E AND F), OPERATORS CHECKLIST (REF G), AND THE AIR TRAFFIC CONTROL FACILITY MANUAL (REF H) WILL MINIMIZE THE HAZARDS OF OPERATION.

-----NOTE-----

K. DURING PREFLIGHT SOMEONE OTHER THAN THE OPERATOR SHALL VERIFY THAT THE RETURN HOME WAYPOINT IS ENTERED CORRECTLY.

-----NOTE-----

L. LOCAL ATC AUTHORITY SHALL BE BRIEFED BEFORE EACH FLIGHT WITH EXPECTED MISSION DURATION TO AID IN AIRSPACE DECONFLICTION.

-----NOTE-----

M. VERIFIED LOSS OF ANY AIRCRAFT FLIGHT CRITICAL SUBSYSTEM OR GROUND CONTROL STATION (GCS) FLIGHT CRITICAL SUB-SYSTEM SHALL REQUIRE RTB.

-----NOTE-----

N. ANY UNEXPLAINED ANOMALY SHALL INITIATE RTB EXCEPT AS NEEDED TO MEET MISSION REQUIREMENTS.

-----NOTE-----

O. ANY PROCEDURAL DEFICIENCIES OR FLIGHT ANOMALIES DETECTED DURING OPERATIONS SHALL BE CORRECTED, ANNOTATED AND REPORTED TO THE POCS IN PARAGRAPH 6.A THROUGH 6.C.

-----NOTE-----

- P. THE RECOMMENDED FUEL FOR SHADOW RQ-7B AIR VEHICLES IS AVGAS 100 LL. IN THE EVENT THAT AVGAS IS NOT AVAILABLE, A MINIMUM 87 OCTANE UNLEADED MOGAS WITH NO ETHANOL ADDITIVES (PER ASTM D4814) MAY BE USED.
5. TIME PERIOD: THIS INTERIM FLIGHT CLEARANCE EXPIRES 27 MAY 2011. OR UPON ISSUANCE OF AWR WHICH CANCELS AND SUPERSEDES REF C.
6. POINTS OF CONTACT:
- A. MARCUS RICHMAN, AIR 4.1.1.5 (UAV CLASS DESK),
TEL: 301-342-3728, EMAIL: MARCUS.RICHMAN@NAVY.MIL
 - B. TOMAS BRANSON, US ARMY, COMM (256) 313-5250,
EMAIL: TOMAS.BRANSON@US.ARMY.MIL
 - C. DAVID HUNNICUTT, US ARMY, COMM (256) 313-5364,
EMAIL: DAVID.HUNNICUTT@US.ARMY.MIL
 - D. RON LYLISTON, 4.0P UAS FLIGHT CLEARANCE FACILITATOR,
TEL: 301-757-0503, EMAIL: RONNIE.LYLISTON.CTR@NAVY.MIL.
 - E. AIRWORTHINESS GLOBAL CUSTOMER SUPPORT TEAM, 301-757-0187,
E-MAIL: AIRWORTHINESS@NAVY.MIL.
7. OTHER REMARKS:
- A. PER REF K, THIS FLIGHT CLEARANCE PROVIDES NAVAIR SAFETY OF FLIGHT CERTIFICATION SUBSEQUENT TO A DESIGN ENGINEERING REVIEW. IT DOES NOT AUTHORIZE AIRCRAFT/SYSTEM MODIFICATION, NOR DOES IT SATISFY NAVAIR REQUIREMENTS FOR CONFIGURATION MANAGEMENT. AS DIRECTED BY OPNAVINST 4790.2J, REFER TO CNAFINST 4790.2A FOR POLICY GUIDANCE ON CONFIGURATION MANAGEMENT AND MOD AUTHORITY.
 - B. PER REF J, THE RQ-7B SHADOW UAS IS CONSIDERED TO BE EXPENDABLE BUT REUSABLE. PROBABILITY OF LOSS OF AIR VEHICLES IS ACCEPTED BY CNAF.
 - C. RANGE AND AIRSPACE CLEARANCE IS THE RESPONSIBILITY OF THE OPERATORS. THIS FLIGHT CLEARANCE DOES NOT ADDRESS INTEROPERABILITY WITH MANNED AIRCRAFT.
 - D. IAW WITH REF I, TRI-SERVICE MOA, THE ARMY AWR (REF C) WAS USED FOR DATA PROVIDED AS THE BASIS FOR AUTHORIZING THIS NAVAIR IFC. CONSULT REF K FOR NAVAIR FLIGHT CLEARANCE POLICY.
 - E. THE DOD DOES NOT HAVE THE AUTHORITY TO AUTHORIZE UAS FLIGHTS IN THE NATIONAL AIRSPACE. APPROVAL TO FLY OUTSIDE ACTIVE RESTRICTED AIRSPACE WITHIN NATIONAL AIRSPACE MUST BE GRANTED BY THE FAA.
 - F. UAV OPERATOR QUALIFICATIONS, MAINTAINER QUALIFICATIONS, CONFIGURATION MANAGEMENT, ESTABLISHED FLIGHT TEST PRACTICES, SCHEDULED/UNSCHEDULED MAINTENANCE PRACTICES, AND OTHER ASSOCIATED PROCEDURES ARE BEYOND THE SCOPE OF THIS FLIGHT CLEARANCE BUT SHOULD BE ADEQUATELY ADDRESSED BY AN APPROPRIATE AUTHORITY TO ENSURE AN ACCEPTABLE LEVEL OF SAFETY FOR THE UAS AND TO MINIMIZE RISK TO GROUND PERSONNEL AND PROPERTY.
 - G. INFORMATION REGARDING THE AIRWORTHINESS OFFICE AND PROCESS, INCLUDING A LISTING OF ALL CURRENT INTERIM FLIGHT CLEARANCES, NATOPS AND NATIP PRODUCTS ISSUED BY NAVAIR 4.0P AND 24/7 CONTACT NUMBERS CAN BE FOUND AT OUR WEBSITE:
AIRWORTHINESS.NAVAIR.NAVY.MIL.
 - H. FOLDER NUMBER IS 893528, AND TRACKING NUMBER IS 36898//

Charles Slade, PEO(U&W) Senior Airworthiness Engineer, 4.0P, 02/26/2010