

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 11-2UV-18
VOLUME 2**

5 MARCH 2004

Flying Operations

UV-18 AIRCREW EVALUATION CRITERIA



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFD 11-2, *Aircraft Rules and Procedures*, and AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*. It establishes procedures and criteria for evaluation of all aircrews performing duties in the UV-18 aircraft. It does not apply to the Air National Guard or Air Force Reserve Command. File a copy of all approved waivers with this instruction. **Attachment 1** contains a glossary of references, abbreviations and acronyms.

See paragraph **1.2.** of this instruction for guidance on submitting comments and suggesting improvements to this publication.

The Privacy Act of 1974 applies to certain information gathered pursuant to this instruction. The Privacy Act System Number F011 AF XO A and Aviation Resource Management Systems (ARMS) covers required information. The authority for maintenance of ARMS is Title 37 U.S.C. 301a (Incentive Pay), Public Law 92-204, Section 715 (Appropriations Act for 1973), Public Laws 93-570 (Appropriations Act for 1974), 93-294 (Aviation Career Incentive Act of 1974), DoDD 7730.57 (Aviation Career Incentive Act of 1974 and Required Annual Report, February 5, 1976, with Changes 1 and 2), and Executive Order 9397. This instruction is affected by the Paperwork Reduction Act as amended in 1996. Ensure that all records created as a result of prescribed processes are maintained in accordance with AFMAN 37-123, *Management of Records*, and disposed of in accordance with AFMAN 37-139, *Records Disposition Schedule*.

SUMMARY OF REVISIONS

Paragraph **1.4.4.** Critical Areas added. Paragraph **2.5.** includes more information about mission pilot evaluation. **Table 2.1.** corrected deviations allowed. **Table 2.1.** CRM areas were added. **Table 3.1.** CRM area evaluation criterion was added. In addition evaluation criteria for the following areas were reworded: Emergency Procedures, Normal Landing, Simulated Engine Out Landing, and Steep Turns in Slow Flight. AF Form 8, **Certificate of Aircrew Qualification**, samples were updated to reflect changes in AFI 11-202 Volume 2. A bar (|) in front of a paragraph indicates change.

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Chapter 1

GENERAL INFORMATION

1.1. Conducting Evaluations. All evaluations are conducted in accordance with the provisions of AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*, and this instruction.

1.2. Recommended Changes and Waivers. Submit suggested improvements to this instruction on AF Form 847, **Recommendation for Change of Publication**, through standardization/ evaluation (stan/eval) channels. Squadron Stan/Eval will forward approved recommendations to 34 OG/OGV in accordance with AFD 11-2, *Aircraft Rules and Procedures*, paragraph 2.4.1. AF/XO is approval authority for changes/revisions to this instruction. AF/XO is waiver authority for this instruction. Waiver requests may be submitted in message or memorandum format through 34 OG/OGV and 34 TRW/CC to AF/XO.

1.3. Procedures:

1.3.1. Flight examiners (FE) use the evaluation criteria contained in **Chapter 3** for conducting flight and emergency procedures evaluations (EPE). To ensure standard and objective evaluations, FEs must become thoroughly familiar with the prescribed evaluation criteria.

1.3.2. Unless specified, the examinee or FE may fly in either seat that best enables the FE to conduct a thorough evaluation. The FE normally occupies the left seat during periodic instructor mission evaluations.

1.3.3. Prior to the flight, the FE briefs the examinee on the purpose of the evaluation and how it is conducted. The examinee accomplishes required flight planning during the evaluation and furnishes the FE a copy of necessary mission data and maps if required.

1.3.4. The FE thoroughly debriefs all aspects of the flight. Debriefs include the examinee's overall rating, specific deviations, area grades assigned (if other than qualified), and any required additional training. A squadron supervisor must attend the debrief if the overall grade is Q-3.

1.3.5. Group OGV FEs (and above) may administer SPOT evaluations (including those outside their aircrew specialty) to any aircrew member assigned to the group. Squadron commanders may task any squadron assigned FE to administer SPOT evaluations to any aircrew member in their squadron.

1.4. Grading Instructions:

1.4.1. Tolerances in performance parameters are based on conditions of smooth air and stable aircraft conditions. Momentary deviations from tolerances are not considered in grading, provided the examinee applies prompt corrective action and such deviations do not jeopardize flying safety. Consider cumulative deviations when determining the area grade.

1.4.2. Use the Grading Criteria in **Table 3.1.** and the definitions listed below to determine individual area grades. When individual areas are performed well above the grading criteria standards, make an appropriate comment stating performance and/or instruction was commendable in the Examiner's Remarks in the Comments block of the AF Form 8, **Certificate of Aircrew Qualification**. FEs must exercise judgment when the wording of areas is subjective and specific situations are not covered.

1.4.2.1. (Q) Performance meets Grading Criteria. Deviations occur that do not detract from the overall Grading Area, but are recognized and corrected in a timely manner.

1.4.2.2. (Q-) Performance does not meet Grading Criteria. Deviations occur that detract from the Grading Area when performed according to the Grading Criteria and/or degrades mission effectiveness. Recognition of deviations is slow or delayed and corrections are imprecise, inefficient, incomplete, or untimely. Maneuvers are performed safely, but with limited proficiency. Examination of maneuver and procedural knowledge reveals deficiencies in depth of knowledge and/or comprehension.

1.4.2.3. (U) Performance does not meet Grading Criteria. Deviations occur that indicate performance outside allowable standards and/or adversely affects mission effectiveness. Recognition and correction of deviations is excessively slow or nonexistent. Performance is unsafe or indicates lack of knowledge or ability.

1.4.3. Derive the overall flight evaluation grade (Q-1, Q-2, or Q-3) from the area grades, based on a composite for the observed events and tasks according to AFI 11-202, Volume 2, this instruction, and FE judgment.

1.4.4. Critical Areas. Critical areas require adequate accomplishment by the examinee in order to successfully achieve the mission objectives. If the examinee receives an unqualified grade in any critical area, the overall grade for the evaluation will be unqualified (Q-3). Critical areas are identified by an "*" in [Table 2.1](#). and by "Critical" in the area title in [Table 3.1](#). Grade critical areas as "Q" or "U".

1.4.5. The General Evaluation Criteria in [Table 1.1](#). apply during all phases of flight (except as noted for specific areas):

Table 1.1. General Evaluation Criteria.

General Area	Q	Q-	U
Altitude	±100 ft	±200 ft	Exceeds Q- limits
Airspeed	±5 kts	±10 kts	Exceeds Q- limits
Heading	Maintains/rolls out ±5° of desired heading	Maintains/rolls out ±10° of desired heading	Exceeds Q- limits

1.5. Emergency Procedures Evaluation (EPE). During the ground evaluation, include a sampling of emergency procedures resolved to a logical conclusion.

1.6. Completion of AF Form 8, Certificate of Aircrew Qualification. Record and certify aircrew member qualification using the AF Form 8 in accordance with [Attachment 2](#) and AFI 11-202V2.

Chapter 2

EVALUATION REQUIREMENTS

2.1. General. There are five types of evaluations in the UV-18: Qualification (QUAL), Mission (MSN), Instrument (INSTM), Instructor (INSTR), and SPOT. All areas for evaluation are shown in **Table 2.1.** of this instruction, "Pilot Evaluations." Required (R) areas are indicated for each type of evaluation and must be sampled to complete the evaluation. Include all required areas in the flight evaluation profile. When it is impossible to evaluate a required area in flight, the FE evaluates it by oral examination to complete the evaluation. Document the oral evaluation in the Examiner's Remarks in the Comments block of the AF Form 8. If the FE determines the required item cannot be adequately evaluated orally, the examinee requires an additional flight to complete the evaluation.

2.2. Requisites. The minimum requisites for qualification and/or mission evaluations are open book, closed book, boldface exams and EPE. Requisites for instrument evaluations are the instrument refresher course and instrument examination. Mission evaluations do not update instrument qualification unless combined with an instrument evaluation (to include all required requisites).

2.3. Copilot Evaluation. All mission copilot (MC) evaluations are combined instrument, qualification and mission evaluations. The examiner briefs the sortie profile and flies from the left seat. Include all required areas from **Table 2.1.** in the flight evaluation profile. Fly a normal departure using Instrument Flight Rules (IFR) navigation procedures. The examinee performs normal approaches and copilot procedures for wind drift indicator (WDI)/Jump Pattern operations at either a nearby or the home airfield. Fly a visual pattern, non-precision and precision approaches and 0°, 10°, and 20° flap landings. Evaluate a sampling of area maneuvers including unusual attitudes, holding, fix-to-fix, circling or arcing.

2.4. First Pilot Evaluation. All first pilot (FP) evaluations are combined instrument, qualification and mission evaluations. The examiner briefs the sortie profile and flies the majority of the profile from the right seat. Include all required areas from **Table 2.1.** in the flight evaluation profile. Fly a normal departure using Instrument Flight Rules (IFR) navigation procedures. The examinee performs normal and single engine approaches and WDI/Jump Pattern operations at either a nearby or the home airfield. The FP mission portion will be evaluated at the copilot level. Fly a visual pattern, non-precision and precision approaches and 0°, 10°, and 20° flap landings, including at least one right seat takeoff and landing. Evaluate a sampling of area maneuvers including unusual attitudes, holding, fix-to-fix, circling, or arcing.

2.5. Mission Pilot Evaluation. All mission pilot (MP) evaluations are combined mission and qualification evaluations to test proficiency. Instrument evaluations may be conducted concurrently, with the MP evaluation. The examinee briefs the sortie profile and flies from the left seat. Normally this evaluation is flown as an out and back with a VFR drop-in at an uncontrolled field, required area work, off-station jump demo, and instrument work. Other profiles may be flown with FE concurrence. Include all required areas from **Table 2.1.** in the flight evaluation profile. Fly a normal departure using IFR navigation/basic instrument procedures. The examinee performs normal and single engine approaches and WDI/Jump Pattern procedures at either a nearby or the home airfield. Fly a visual pattern, 0°, 10°, and 20° flap landings. If an instrument evaluation is conducted concurrently fly non-precision and precision approaches and a sampling of area maneuvers including unusual attitudes, holding, fix-to-fix, circling or arcing.

2.6. Instructor Pilot Evaluation. All instructor pilot evaluations are combined mission, qualification, and instrument evaluations to test both proficiency and instructor ability. The examinee briefs the sortie profile and flies from the right seat. Include all required areas from **Table 2.1.** in the flight evaluation profile. Fly a normal departure, followed by WDI/Jump Pattern procedures and IFR navigation using basic instrument procedures. The examinee performs normal and single engine approaches at either a nearby or the home airfield. Fly a visual pattern, non-precision and precision approaches and 0°, 10°, and 20° flap landings. Evaluate a sampling of area maneuvers including unusual attitudes, holding, fix-to-fix, circling or arcing.

Table 2.1. Pilot Evaluations.

Area	Title	MC	FP	MP	IP
		QUAL/ INSTM/ MSN	QUAL/ INSTM/ MSN	QUAL/ INSTM/ MSN	INSTR/ QUAL/ INSTM/ MSN
1	General Knowledge	R	R	R	R
2	Emergency Procedures	R	R	R	R
3	Publications	R	R	R	R
4	Mission Planning	R	R	R	R
5	Ground Operations	R	R	R	R
6	In-Flight Checks	R	R	R	R
7	Takeoff	R	R	R	R
8	Radio Procedures	R	R	R	R
9	Judgment	R	R	R	R
10	Communications	R	R	R	R
11	Clearing	R	R	R	R
12	Situational Awareness	R	R	R	R
13	Visual Pattern	R	R	R	R
14	Normal Landing	R	R	R	R
15	Simulated Engine Out Pattern		R	R	R
16	Simulated Engine Out Landing		R	R	R
17	Single Engine Go-Around		R	R	R
18	Power On-Stalls	R	R	Note 1	Note 1
19	Traffic Pattern Stall	R	R	Note 1	Note 1
20	Steep Turns	R	R	Note 2	Note 2
21	Slow Flight	R	R	Note 2	Note 2
22	WDI/Jump Pattern Procedures	R	R	R	R
23	In-Flight Planning/ Airspace Coordination	R	R	R	R

Area	Title	MC	FP	MP	IP
		QUAL/ INSTM/ MSN	QUAL/ INSTM/ MSN	QUAL/ INSTM/ MSN	INSTR/ QUAL/ INSTM/ MSN
24	Outbase Procedures			R	R
25	Departure/Enroute Navigation	R	R	R	R
26	Basic Instrument Flight	R	R	R	R
27	GPS Usage		R	R	R
28	Unusual Attitudes	Note 3	Note 3	Note 3	Note 3
29	Holding	Note 3	Note 3	Note 3	Note 3
30	Fix-to-Fix	Note 3	Note 3	Note 3	Note 3
31	Arcing	Note 3	Note 3	Note 3	Note 3
32	Circling Approach	Note 3	Note 3	Note 3	Note 3
33	Missed Approach	R	R	R	R
34	Transition to Land/Landing	R	R	R	R
35	Recovery	R	R	R	R
36	ADF Approach	Note 4	Note 4	Note 4	Note 4
37	VOR/VOR-DME Approach	Note 4	Note 4	Note 4	Note 4
38	ASR Approach	Note 4	Note 4	Note 4	Note 4
39	Localizer Approach	Note 4	Note 4	Note 4	Note 4
40	GPS Approach		Note 4	Note 4	Note 4
41	ILS Approach	Note 4	Note 4	Note 4	Note 4
42	PAR Approach	Note 4	Note 4	Note 4	Note 4
43	Mission Briefing/Debriefing			R	R
44	Grading Practices				R
45	Touch-and-Go Procedures				R
46	Forms Completion			R	R
47	Task Management	R	R	R	R
48	Risk Management	R	R	R	R

LEGEND:

R - Required

Shaded areas - Not required

NOTES:

1. Sample either Power-on or Traffic Pattern Stalls.
2. Sample either Slow Flight or Steep Turns.
3. For concurrent instrument checks, at least one of the following is required: Unusual Attitudes, Holding, Fix-to-Fix, Arcing, or Circling Approach.
4. For concurrent instrument checks, sample at least one precision and one non-precision approach.

Chapter 3

EVALUATION CRITERIA

3.1. Evaluations. To ensure standard and objective evaluations, use Grading Criteria in [Table 3.1](#) for required proficiency standards. However, when evaluating instructors, use more general criteria to determine if instructor performance meets the desired mission objectives. Apply the following guidelines to assess the quality of instruction:

3.1.1. Accuracy. Instruction of a particular task is based on the delivery of accurate information, i.e., any information presented by the instructor should accurately reflect the numbers, procedures, and policies contained in the grading criteria.

3.1.2. Appropriateness. Tailor instruction to the student and to the task being performed. Avoid teaching above or below the probable level of student understanding.

3.1.3. Timeliness. Time instructor input to provide the maximum benefit to the student learning a given task. Depending on the particular situation, this input may be best given at prebrief, during an instructor demonstration, after student performance, or during a debrief.

3.1.4. Error Analysis. The instructor notes student errors, and delivers feedback to the student in a fashion that focuses on the techniques and/or procedures necessary for student improvement.

3.1.5. Presentation. Instructor manner and presentation of information is always positive and motivational. Negatively oriented and demeaning delivery is never acceptable.

3.1.6. Intervention. The instructor intervenes, either verbally or physically, prior to exceeding appropriate safety limits. Conversely, the instructor does not intervene so early as to reduce the opportunity for student learning.

Table 3.1. Evaluation Criteria.

Grading Area	Grading Criteria
Area 1. General Knowledge	Demonstrates thorough knowledge of aircraft systems, limitations, and performance characteristics.
a. Aircraft General:	
b. Flight Rules Procedures:	Demonstrates thorough knowledge of flight rules and procedures.
c. Local Area Procedures:	Demonstrates thorough knowledge of local procedures.
Area 2. Emergency Procedures:	Uses all available indications to analyze the situation and emergency. Applies correct, immediate response to Boldface and non-Boldface emergency situations. Resolves the emergency situation to a logical conclusion. Effectively uses checklist and crew resource management. If in flight, maintains aircraft control during performance of critical or non-critical action emergency procedures.
Area 3. Publications:	All publications required by AFI 11-2UV-18V3 and local procedures are current, contain all supplements/changes and are properly posted.

Grading Area	Grading Criteria
Area 4. Mission Planning:	Checks all factors applicable to flight according to applicable directives. Aware of alternatives available if flight cannot be completed as planned. Complies with local sign-out procedures. Prepared at brief time.
Area 5. Ground Operations:	Accurately determines readiness of aircraft for flight. Performs all pre-takeoff and post-landing checks in accordance with the flight manual and applicable directives. Taxis the aircraft safely while maintaining proper control deflections and power settings for existing winds and visually clears for ground traffic and obstacles.
Area 6. In-Flight Checks:	Correctly performs all required in-flight checks in a timely manner. Refers to appropriate checklists for all normal and simulated emergency procedures if time and conditions permit.
Area 7. Takeoff:	Maintains smooth aircraft control on centerline throughout takeoff. Allows the aircraft to accelerate to rotation speed (-0, +5kts) and then maintains nosewheel off the runway until liftoff at 71-73 kts. Checks acceptable engine performance prior to lift off. Transitions timely to the appropriate climb angle and airspeed (+5 kts).
Area 8. Radio Procedures:	Complete knowledge of and compliance with correct communication procedures. Effectively communicates with concise, accurate, and proper radio terminology. Maintains awareness of other radio calls and times transmissions appropriately.
Area 9. Judgment: (Critical)	Displays the airmanship and ability to make timely decisions and select alternative courses of action essential to mission accomplishment. Recognizes deviations and unsafe situations and takes appropriate action without prompting. Recognizes environmental effects on the mission and adjusts accordingly.
Area 10. Communications:	Displays complete knowledge of and compliance with correct communication procedures. Effectively communicates with concise, accurate and proper radio terminology. Maintains awareness of other radio calls and times transmissions appropriately. Effectively communicates with other crewmembers.
Area 11. Clearing:	Maintains constant vigilance during all phases of flight using visual and auditory information to recognize and avoid conflicting traffic.
Area 12. Situational Awareness: (Critical)	Displays the airmanship and ability to make timely decisions and select alternative courses of action essential to mission accomplishment. Recognizes deviations and unsafe situations and takes appropriate action without prompting. Recognizes environmental effects on the mission and adjusts accordingly. Interacts with other crewmembers to recognize and correct unsafe situations.

Grading Area	Grading Criteria
Area 13. Visual Pattern:	Flies the visual pattern using appropriate pattern spacing, pattern altitude, and appropriate glidepath on final. Uses adequate pitch and power setting to maintain altitude (± 150 ft) and pattern airspeeds (-5, +10 kts of briefed airspeed).
Area 14. Normal Landing:	While established on final, begins a round out and flare 5-15 ft AGL. Selects proper aimpoint and power is reduced with consideration given to gross weight, winds, and runway length so as to touchdown at briefed touchdown point (+500 ft). Removes any crab and/or drift prior to touchdown and maintains runway centerline. Touchdown occurs near the stall speed. Does not apply reverse thrust and brakes until the nosewheel is down (full stop landings only).
Area 15. Simulated Engine Out Pattern:	Flies the single engine pattern while maintaining proper aircraft control. Proper pitch and power settings are established with the use of the good engine. All applicable checklist items and the in-flight guide are referenced and accomplished in a timely manner. Proper analysis of pattern winds is used to maintain proper spacing. Maintains pattern altitude (± 150 ft) and airspeed (-0, +10 kts).
Area 16. Simulated Engine Out Landing:	Sets the proper pitch picture on final in order to achieve the proper round-out and landing attitude on touchdown. Power is reduced at the proper point with consideration given to gross weight, winds, and runway length. The landing is made on centerline with no crab in the first 1500 ft of the runway. Upon touchdown, avoids the use of reverse thrust and maintains aero-braking until approximately 40-45 kts. The nosewheel is then lowered to the runway and wheel braking brings the aircraft to a stop without skidding.
Area 17. Single Engine Out Go Around:	Safely executes the go-around procedure as per the SINGLE ENGINE GO-AROUND checklist. In the event of unplanned go-arounds, the decision to go-around is made in a timely manner and with minimum altitude loss. Aircraft control is maintained by use of rudder and aileron for minimum drag, initially setting throttle to the first red line limit of T5, torque, or Ng, and propeller is set to full increase revolutions per minute (RPM).
Area 18. Power On Stalls:	Sets approximately 20-25° nose high and recognizes the full stall indication for the power on stall. Recovery is accomplished without adjusting power by releasing elevator backpressure and rolling wings level. Avoids secondary stalls and does not exceed G limitations.
Area 19. Traffic Pattern Stall:	Recovers promptly at the first aerodynamic indication of a stall by relaxing back elevator pressure, adding power, and using rudder and ailerons to roll wings level. Recovers to the airspeed the maneuver was started at and does not descend during recovery.

Grading Area	Grading Criteria
Area 20. Steep Turns:	In turns using 45° or 60° of bank, controls airspeed (± 10 kts), altitude (± 200 ft), and rolls out on desired point ($\pm 10^\circ$). Uses sufficient rudder to remain coordinated throughout the maneuver.
Area 21. Slow Flight:	Performs three consecutive turns of 90°, 180°, and 90°. Rolls out on beginning heading ($\pm 10^\circ$). Maintains airspeed (70-75 kts), bank (up to 45°) and altitude (± 100 ft) throughout the maneuver. Uses sufficient rudder to remain coordinated.
Area 22. WDI/Jump Pattern Procedures:	Flies the WDI and Jump Patterns (-100, +200 ft) at 80-85 kts. Displays a good understanding of how the winds affect the pattern and establishes proper drift correction.
Area 23. In-Flight Planning/Airspace Coordination:	Follows local area procedures regarding area boundaries, required ground tracks, and altitude restrictions for all phases of flight. Efficiently uses available airspace to safely accomplish the mission. Plans each jump pattern to meet the appropriate timing requirements for the parachute drops. Accomplishes this through proper drift corrections and knowledge of the jump run-in ground track. If additional airspace is needed, coordinates for its use by following the published procedures.
Area 24. Outbase Procedures:	Demonstrates proper Flight Service Station (FSS)/Base Operations procedures. Conducts proper trip planning to include: AF Form 70, Pilot's Flight Plan and Flight Log or equivalent, takeoff weight and climb performance, cargo loading and fuels coordination. Knows proper aircraft handling requirements to include: fueling, propeller locks, intake covers, tie down points and door locks.
Area 25. Departure/Enroute Navigation:	Performs departure and navigation as directed and/or in accordance with local directives.
Area 26. Basic Instrument Flight:	Maintains proper airspeed, headings and altitudes. When deviations occur, timely corrections are made to place the aircraft back within proper parameters. Uses the control-performance concept in setting proper pitch and power settings to maintain airspeed, altitude and heading.
Area 27. GPS Usage:	Can perform: turn-on and self test, waypoint selection, flight plan entry/use, direct-to operation, use navigation pages, wind calculation, supplemental waypoint navigation, nearest airport function, message page viewing and find frequencies for nearest FSS/Air Route Traffic Control Center.
Area 28. Unusual Attitudes:	Recovers to level flight expeditiously using procedures outlined in AFMAN 11-217, Volume 1, <i>Instrument Flight Procedures</i> , while not exceeding G or bank limitations.
Area 29. Holding:	Executes holding procedures in accordance with AFMAN 11-217, Volume 1. Maintains altitude, airspeed, VOR timing (± 15 seconds) and VOR/DME distance (+2 NM).

Grading Area	Grading Criteria
Area 30. Fix-to-Fix:	Fix-to-fix procedures are flown in accordance with steps outlined in AFMAN 11-217, Volume 1. An approximate initial heading is determined followed by a sustained effort to continually update the initial heading to arrive at the fix (± 2 NM).
Area 31. Arcing:	Proper aircraft control is maintained throughout this instrument procedure maintaining the arc (± 1 NM).
Area 32. Circling Approach:	Descends to the proper circling minimum descent altitude MDA (-0, +100') and circles in the proper direction. Executes procedure in accordance with AFMAN 11-217, Volume 1.
Area 33. Missed Approach:	Knows and executes the proper missed approach/climb out procedures. Understands the differences between missed approach and climb out instructions and flies the appropriate procedure.
Area 34. Transition to Land:	Accomplishes the transition from the instrument approach to landing in accordance with AFMAN 11-217, Volume 1. Safely places the aircraft in a position to land while avoiding tendencies to "duck under."
Area 35. Recovery:	Flies as directed or via the published recovery routings.
Areas 36-39. Non-Precision Approaches:	Adheres to all published or directed procedures and restrictions. Uses appropriate descent rate to arrive at MDA (-0, +100') at or before the visual descent point. Position permits a safe landing. Maintains airspeed (-5, +10 kts), airport surveillance radar (ASR) heading ($\pm 5^\circ$), course at missed approach point ($\pm 5^\circ$), localizer course (less than one dot deflection) and MDA (-0, +100 ft). Is able to properly load and fly GPS approach as well as understand GPS displays.
Areas 40-42. Precision Approaches:	Performs procedures as published and according to applicable flight manual guidance. Makes smooth and timely corrections to azimuth and glide slope. Complies with decision height. Aircraft position permits a safe landing. Maintains airspeed (-5, +10 kts), instrument landing system (ILS) glide slope or azimuth (\pm one dot), and precision approach radar (PAR) heading ($\pm 5^\circ$).
Area 43. Mission Briefing/Debriefing:	Properly briefs/debriefs all applicable areas in accordance with the training syllabus.
Area 44. Error Analysis/Grading Practices:	Accurately assesses student's ability and records grades in accordance with the training syllabus.
Area 45. Touch-and-Go Practices:	Executes touch-and-go procedures while maintaining proper aircraft control. Checklist items are accomplished smoothly and with little deviation from runway centerline. Procedures and crew coordination thoroughly briefed.
Area 46. Forms Completion:	Properly fills out the training folder in accordance with the training syllabus.

Grading Area	Grading Criteria
Area 47. Task Management:	Effectively sets priorities in flight. Uses other crewmembers when task overloaded. Recognizes when other crewmembers are overloaded and assists when required.
Area 48. Risk Management:	Accurately identifies pertinent risk to mission. Maintains flight discipline to manage in-flight risk.

3.2. Forms Adopted. AF Form 8, **Certificate of Aircrew Qualification**; AF Form 70, **Pilot's Flight Plan and Flight Log**; AF Form 847, **Recommendation for Change of Publication**.

RONALD E. KEYS, Lt General, USAF
DCS/Air & Space Operations

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 11-2, *Aircraft Rules and Procedures*

AFI 11-2UV-18, Volume 1, *UV-18 Aircrew Training*

AFI 11-2UV-18, Volume 3, *UV-18 Operations Procedures*

AFI 11-202, Volume 2, *Aircrew Standardization/Evaluation Program*

AFMAN 11-217, Volume 1, *Instrument Flight Procedures*

AFMAN 37-123, *Management of Records*

AFMAN 37-139, *Records Disposition Schedule*

Abbreviations and Acronyms

ADF—Automatic Direction Finder

AGL—Above Ground Level

ARMS—Aviation Resource Management Systems

ASR—Airport Surveillance Radar

DO—Director of Operations

DME—Distance Measuring Equipment

EPE—Emergency Procedures Evaluation

FE—Flight Examiner

FP—First Pilot

FSS—Flight Service Station

FT—Feet

G—Gravitational Load Factor

GPS—Global Positioning System

IFR—Instrument Flight Rules

ILS—Instrument Landing System

INSTM —Instrument

INSTR —Instructor

IP—Instructor Pilot

KTS—Knots Per Hour

MAJCOM—Major Command

MC—Mission Qualified Copilot

MDA—Minimum Descent Altitude

MP —Mission Pilot

NM—Nautical Mile

OG—Operations Group

OGV—Operations Group Standardization/Evaluations

PAR—Precision Approach Radar

Q—Qualified

QUAL—Qualification

R—Required Area

RPM—Revolutions Per Minute

STAN/EVAL—Standardization/Evaluation

VOR—Very High Frequency Omni-directional Radio

WDI—Wind Drift Indicator

Attachment 2

SAMPLE AF FORMS 8, CERTIFICATE OF AIRCREW QUALIFICATION

Figure A2.1. Sample of AF Form 8 Illustrating Qualification/Instrument - Q1.

CERTIFICATE OF AIRCREW QUALIFICATION					DATE COMPLETED 19980901	
I. EXAMINEE IDENTIFICATION						
NAME (Last, First, Middle Initial) Otter, Twin			GRADE Capt		SSAN 123-45-6789	
ORGANIZATION AND LOCATION 98 FTS, USAF Academy CO			ACFT/CREW POSITION UV-18B/MP		ELIGIBILITY PERIOD May - Oct 98	
II. QUALIFICATION						
GROUND PHASE			FLIGHT PHASE			
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK		DATE	
Open Book	19980630	98	INSTM/QUAL/MSN		19980901	
Closed Book	19980630	95				
Boldface	19980630	Q				
EPE	19980901	1				
IRC	19980522	98				
QUALIFICATION LEVEL		RESTRICTION (Explain in Comments) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ADDITIONAL TRAINING			
QUALIFIED	UNQUALIFIED		DUE DATES			
1			N/A			
EXPIRATION DATE OF QUALIFICATION Feb 00			DATE ADDITIONAL TRAINING COMPLETED N/A			
COMMENTS (If more space is needed, continue on reverse) EXCEPTIONALLY QUALIFIED EXAMINER'S REMARKS: A. Mission Description: The examinee completed a satisfactory Qualification/Mission evaluation. Mission planning, required area work, instrument procedures, emergency procedures were accomplished. The mission was flown as an out and back with one leg flown VFR with area work and the other leg was flown IFR. All required VFR and IFR procedures to include one precision and one non-precision approach were accomplished. General Knowledge (QUAL) and VFR Navigation were commendable. B. Discrepancies: None						
III. CERTIFICATION						
TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
		CONCUR	DO NOT CONCUR	REMARKS		
1 FLIGHT EXAMINER Carl T. Hammer, Capt	34 OG/OGV			X		19980901
2 REVIEWING OFFICER Clarence K. Johnson, Maj	98 FTS/DO					
3 FINAL APPROVING OFFICER Henry H. Arnold, LtCol	98 FTS/CC					
I CERTIFY that I have been briefed and understand the action being taken this date						
DATE	TYPED NAME AND GRADE OF EXAMINEE Twin Otter, Capt			SIGNATURE		

Figure A2.2. Sample of AF Form 8 Illustrating Initial Qualification/Instructor - Q2.

CERTIFICATE OF AIRCREW QUALIFICATION					DATE COMPLETED 19981113	
I. EXAMINEE IDENTIFICATION						
NAME (Last, First, Middle Initial)			GRADE	SSAN		
Boeing, William E.			Capt	123-45-6789		
ORGANIZATION AND LOCATION			ACFT/CREW POSITION	ELIGIBILITY PERIOD		
98 FTS, USAF Academy CO			UV-18B/IP	N/A		
II. QUALIFICATION						
GROUND PHASE			FLIGHT PHASE			
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK		DATE	
Open Book	19981103	96	INIT INSTR/INSTM/QUAL/MSN		19981113	
Closed Book	19981104	85/90				
Boldface	19981104	Q				
EPE	19981113	1				
IRC	19981105	100				
QUALIFICATION LEVEL			ADDITIONAL TRAINING			
QUALIFIED	UNQUALIFIED		RESTRICTION (Explain in Comments)		DUE DATES	
2			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		31 Jan 1999	
EXPIRATION DATE OF QUALIFICATION Apr 00			DATE ADDITIONAL TRAINING COMPLETED 30 Nov 1998			
COMMENTS (If more space is needed, continue on reverse)						
RESTRICTIONS: A. The examinee will not fly as an aircrew member until successful completion of additional training.						
EXAMINERS REMARKS: A. Mission Description: The mission included Mission Planning, Ground Instruction, Area Work (INSTR), Instrument and Single Engine Work (INSTR), and VFR Procedures on an Out and Back to Santa Fe NM. B. Discrepancies: 1. Ground. Area 1. General Knowledge (QUAL) -- Q-. Debriefed. Knowledge of local area procedures was incomplete. Corrected during debrief.						
III. CERTIFICATION						
TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
		CONCUR	DO NOT CONCUR	REMARKS		
1 FLIGHT EXAMINER Carl T. Hammer, Capt	34 OG/OGV			X		19981113
2 REVIEWING OFFICER Clarence K. Johnson, Maj	98 FTS/DO					
3 FINAL APPROVING OFFICER Henry H. Arnold, LtCol	98 FTS/CC					
I CERTIFY that I have been briefed and understand the action being taken this date						
DATE	TYPED NAME AND GRADE OF EXAMINEE William E. Boeing, Capt				SIGNATURE	

AF FORM 8 CONTINUATION SHEET

(Fig. A2.2. Continued).

2. Flight.

Area 6. In-Flight Checks (QUAL). -- Q-. Debriefed. Preoccupation with instruction resulted in late completion of the Before Landing Check. Corrected during debrief.

Area 7. Take-off (QUAL). -- Q-. Debriefed. Higher than normal takeoff attitude resulted in premature liftoff. Corrected during debrief.

Area 14. Visual Pattern (QUAL). -- Q-. Debriefed. Rushed pattern and a long aimpoint resulted in landing long. Corrected during debrief.

C. Recommended Additional Training:

1. Ground. Accomplish two hours of procedures review, followed by a ground evaluation with an IP.
2. Flight. Accomplish one training sortie with an IP, emphasizing takeoffs and patterns.

REVIEWING OFFICER'S REMARKS: Capt Boeing completed additional training with Capt Jones on 30 Nov 1998. The ground evaluation and sortie covered all required areas to a satisfactory level. No further action required.

//signed/dated//

CLARENCE K. JOHNSON, Maj, USAF
Operations Officer

Figure A2.3. Sample of AF Form 8 Illustrating Initial Qualification - Q3.

CERTIFICATE OF AIRCREW QUALIFICATION				DATE COMPLETED 19981110		
I. EXAMINEE IDENTIFICATION						
NAME (Last, First, Middle Initial) Cessna, Clyde			GRADE Capt		SSAN 123-45-6789	
ORGANIZATION AND LOCATION 98 FTS, USAF Academy CO			ACFT/CREW POSITION UV-18B/MC [or FP]		ELIGIBILITY PERIOD N/A	
II. QUALIFICATION						
GROUND PHASE			FLIGHT PHASE			
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK	DATE		
Open Book	19981003	96	INIT INSTM/QUAL/MSN	19981110		
Closed Book	19981004	90				
Boldface	19981004	Q				
EPE	19981024	3/1				
IRC	19981015	98				
QUALIFICATION LEVEL		RESTRICTION (Explain in Comments) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	ADDITIONAL TRAINING			
QUALIFIED	UNQUALIFIED		DUE DATES			
	3		EPE, 19981231, FLT 19990131			
EXPIRATION DATE OF QUALIFICATION N/A			DATE ADDITIONAL TRAINING COMPLETED EPE, 19981024, FLT 19981107			
COMMENTS (If more space is needed, continue on reverse)						
RESTRICTIONS: A. The examinee will accomplish additional EPE training before the flight phase of the evaluation.						
EXAMINERS REMARKS: A. Mission Description: No flight evaluation flown due to unsatisfactory performance during the EPE. B. Discrepancies: 1. Ground (EPE). (Date of Q-3: 19981013). Knowledge of local area procedures and flight manual was inadequate.						
III. CERTIFICATION						
TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
		CONCUR	DO NOT CONCUR	REMARKS		
1 FLIGHT EXAMINER Carl T. Hammer, Capt	98 FTS/DOV			X		19981110
2 REVIEWING OFFICER Clarence K. Johnson, Maj	98 FTS/DO					
3 FINAL APPROVING OFFICER Henry H. Arnold, LtCol	98 FTS/CC					
I CERTIFY that I have been briefed and understand the action being taken this date						
DATE	TYPED NAME AND GRADE OF EXAMINEE Clyde Cessna, Capt			SIGNATURE		

AF FORM 8 CONTINUATION SHEET

(Fig. A2.3. Continued).

C. Recommended Additional Training:

1. Ground (EPE)

Examinee must accomplish two hours of local area procedures and the flight manual under the supervision of an IP.

REVIEWING OFFICER'S REMARKS: Capt Cessna completed all additional ground training with Capt Sticek 24 Oct 1998. Flight evaluation required.

//signed/dated//

CLARENCE K. JOHNSON, Maj, USAF
Operations Officer

RESTRICTIONS:

- A. The examinee is placed in a SUPERVISED STATUS and will not perform aircrew duties until a successful QUAL recheck has been accomplished.

EXAMINERS REMARKS:

- A. Mission Description: The examinee completed an unsatisfactory evaluation. The mission included Jump Lines at USAFA and Area Work at Pueblo.
- B. Discrepancies:
1. Flight.
Area 7. Takeoff -- (QUAL). Q-. Debriefed. Higher than normal takeoff attitude resulted in premature liftoff. Corrected during debrief.
Area 39. VOR Approach -- (QUAL). U. Examinee flew through the MDA resulting in leveling off 200' low, upon correcting the examinee was high at the VDP resulting in a steep final and IP intervention.
- C. Recommended Additional Training:
1. Flight. Examinee must fly a minimum of two review sorties with an IP, emphasizing proper NonPrecision Approach procedures. Flight recheck must be accomplished for instrument approaches to an acceptable level.

REVIEWING OFFICERS REMARKS: Two sorties emphasizing correct Circling Approach procedures were flown with Capt Jones on 19981106 and 19981107. RQ QUAL evaluation required.

//signed/dated//

CLARENCE K. JOHNSON, Maj, USAF
Operations Officer

Figure A2.4. Sample of AF Form 8 Illustrating Recheck - Q1.

CERTIFICATE OF AIRCREW QUALIFICATION					DATE COMPLETED 19981128	
I. EXAMINEE IDENTIFICATION						
NAME (Last, First, Middle Initial) Cessna, Clyde			GRADE Capt		SSAN 123-45-6789	
ORGANIZATION AND LOCATION 98 FTS, USAF Academy CO			ACFT/CREW POSITION UV-18B/MC [or FP]		ELIGIBILITY PERIOD N/A	
II. QUALIFICATION						
GROUND PHASE			FLIGHT PHASE			
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK		DATE	
			RQ INSTM/QUAL/MSN		19981128	
QUALIFICATION LEVEL		RESTRICTION (Explain in Comments) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ADDITIONAL TRAINING			
QUALIFIED	UNQUALIFIED		DUE DATES N/A			
1			DATE ADDITIONAL TRAINING COMPLETED N/A			
EXPIRATION DATE OF QUALIFICATION Apr 00						
COMMENTS (If more space is needed, continue on reverse)						
EXAMINERS REMARKS:						
A. Mission Description: This was a recheck QUAL evaluation. The examinee accomplished all Circling Approach procedures successfully.						
B. Discrepancies:						
1. Flight.						
Area 14. Visual Pattern (QUAL) -- Q-. Debriefed. Long aimpoint resulted in landing longer than desired. Corrected during debrief.						
III. CERTIFICATION						
TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
		CONCUR	DO NOT CONCUR	REMARKS		
1 FLIGHT EXAMINER Carl T. Hammer, Capt	98 FTS/DOV			X		19981128
2 REVIEWING OFFICER Clarence K. Johnson, Maj	98 FTS/DO					
3 FINAL APPROVING OFFICER Henry H. Arnold, LtCol	98 FTS/CC					
I CERTIFY that I have been briefed and understand the action being taken this date						
DATE	TYPED NAME AND GRADE OF EXAMINEE Clyde Cessna, Capt			SIGNATURE		

Figure A2.5. Sample of AF Form 8 Illustrating No-Notice Qualification/Instructor - Q1.

CERTIFICATE OF AIRCREW QUALIFICATION				DATE COMPLETED 19981016		
I. EXAMINEE IDENTIFICATION						
NAME (Last, First, Middle Initial)			GRADE	SSAN		
Schlelcher, Alexander			Capt	123-45-6789		
ORGANIZATION AND LOCATION			ACFT/CREW POSITION	ELIGIBILITY PERIOD		
98 FTS, USAF Academy CO			UV-18B/IP	N/A		
II. QUALIFICATION						
GROUND PHASE			FLIGHT PHASE			
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK		DATE	
Open Book	19981014	95	NN INSTR/QUAL/MSN		19980919	
Closed Book	19981015	85				
Boldface	19981015	Q				
EPE	19980919	1				
IRC	19981015	100				
QUALIFICATION LEVEL		RESTRICTION (Explain in Comments) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ADDITIONAL TRAINING			
QUALIFIED	UNQUALIFIED		DUE DATES			
1			N/A			
EXPIRATION DATE OF QUALIFICATION Feb 00			DATE ADDITIONAL TRAINING COMPLETED N/A			
COMMENTS (If more space is needed, continue on reverse)						
EXAMINERS REMARKS:						
A. Mission Description. The examinee completed a No-Notice evaluation. This evaluation satisfies recurring evaluation requirements. Stalls (INSTR) were commendable. All required items were included in the mission including Area and Instrument Work at Pueblo.						
B. Discrepancies. None.						
Note: The "Date Completed" is the date of the last evaluation requisite, while the "Expiration Date" is based on the date of the flight phase. These blocks, and the test scores, remain blank until the testing is complete (must be accomplished no later than the last day of the 2nd month following the month of the flight evaluation). Show "Eligibility Period" if examinee is In-the-Eligibility Period. If open and closed book exams are taken on different dates, use the latest date in the "Date Block".						
III. CERTIFICATION						
TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
		CONCUR	DO NOT CONCUR	REMARKS		
1 FLIGHT EXAMINER Carl T. Hammer, Capt	34OG/OGV			X		19981016
2 REVIEWING OFFICER Clarence K. Johnson, Maj	98 FTS/DO					
3 FINAL APPROVING OFFICER Henry H. Arnold, LtCol	98 FTS/CC					
I CERTIFY that I have been briefed and understand the action being taken this date						
DATE	TYPED NAME AND GRADE OF EXAMINEE Alexander Schlelcher, Capt			SIGNATURE		

Figure A2.6. Sample of AF Form 8 Illustrating No-Notice Spot - Q1.

CERTIFICATE OF AIRCREW QUALIFICATION					DATE COMPLETED 19980919	
I. EXAMINEE IDENTIFICATION						
NAME (Last, First, Middle Initial) Weibel, Gerhard			GRADE Capt		SSAN 123-45-6789	
ORGANIZATION AND LOCATION 98 FTS, USAF Academy CO			ACFT/CREW POSITION UV-18B/MP		ELIGIBILITY PERIOD N/A	
II. QUALIFICATION						
GROUND PHASE			FLIGHT PHASE			
EXAMINATION/CHECK	DATE	GRADE	MISSION/CHECK		DATE	
			NN SPOT		19980919	
QUALIFICATION LEVEL		RESTRICTION (Explain in Comments) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ADDITIONAL TRAINING			
QUALIFIED	UNQUALIFIED		DUE DATES			
1			N/A			
EXPIRATION DATE OF QUALIFICATION N/A			DATE ADDITIONAL TRAINING COMPLETED N/A			
COMMENTS (If more space is needed, continue on reverse) EXAMINERS REMARKS: A. Mission Description. The examinee completed a No-Notice evaluation. This evaluation does not satisfy recurring evaluation requirements. B. Discrepancies. None						
III. CERTIFICATION						
TYPED NAME AND GRADE	ORGANIZATION	CHECK			SIGNATURE	DATE
		CONCUR	DO NOT CONCUR	REMARKS		
1 FLIGHT EXAMINER Carl T. Hammer, Capt	34 OG/OGV			X		19980919
2 REVIEWING OFFICER Clarence K. Johnson, Maj	98 FTS/DO					
3 FINAL APPROVING OFFICER Henry H. Arnold, LtCol	98 FTS/CC					
I CERTIFY that I have been briefed and understand the action being taken this date						
DATE	TYPED NAME AND GRADE OF EXAMINEE Gerhard Weibel, Capt			SIGNATURE		