COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

This volume implements AFPD 11-2, *Aircraft Rules and Procedures*; AFPD 11-4, *Aviation Service*; and AFI 11-202V2, *Aircrew Standardization/Evaluation Program*. It applies to all B-2 aircrews. This volume does not apply to Air National Guard (ANG) or Air Force Reserve Command (AFRC) units. MAJCOMs/ DRUs/FOAs are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ ACC/DOTO for review and coordination prior to publication IAW AFPD 11-2. Copies of MAJCOM/ DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/ DRU/FOA to HQ USAF/XOOT, HQ ACC/DOTO, and the user MAJCOM/DRU/FOA offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **NOTE:** The terms Direct Reporting Unit (DRU) and Field Operating Agency (FOA) as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360V1, *Publications Management Program*. See paragraph **1.2.** of this volume for guidance on submitting comments and suggesting improvements to this publication.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

Many of the changes appearing throughout this instruction are administrative. Paragraph **1.3.4.**: Change activity evaluated in the WST must be simulator certified (SIMCERT) Training Value Code (TVC) "1" (previously 2). Paragraph **1.3.4.**: Add verbiage allowing pre-check sortie items to be used to complete incomplete student evaluations (consistent with AFI 11-2B-52V2). **Table 1.1.**: Change altitude criteria for Q- from 200' to 300'. Paragraph **1.5.1.3.**: Add Terrain Following/Low Level Navigation as mandatory items for all CMR and/or TF qualified aircrew EPEs. Paragraph **2.3.4.**: Add conventional weapon release must include the GATS tactic, either auto or manual, unless an actual weapon is being dropped. Paragraph **2.6.** Add dual-seat qualified mission commanders will take their recurring evaluations in the right seat. **Table 2.1.**: Add note for recurring checks only, if the visual pattern cannot be accomplished due to

weather, the evaluation can be considered complete. Paragraph **3.2.18.1.** Change emergency procedure Q criteria from +15/-10 to + 10/- 5 KIAS. Paragraph **3.2.18.2.**: Change emergency procedure Q- criteria from +20/-15 to + 15/-10 KIAS. Paragraph **3.3.7.** Added new evaluation Area 37—National Airspace System (NAS) Flight Operations Compliance IAW AFI 11-202V2.

CHAPTER 1

GENERAL INFORMATION

1.1. General. All evaluations will be conducted IAW the provisions of AFI 11-202V2 and this volume.

1.2. Recommended Changes and Waivers. Recommendations for improvements to this volume should be submitted on AF Form 847, **Recommendation for Change of Publication**, IAW AFI 11-215, *Flight Manuals Program (FMP)*, to the parent MAJCOM. HQ ACC/DO is the waiver authority for this volume. Waiver requests must include the following as applicable:

1.2.1. Name, rank, crew position, type of evaluation, expiration date, and applicable paragraph.

1.2.2. Justification for waiver.

1.2.3. Unit plan of action.

1.3. Procedures:

1.3.1. Stan/Eval Flight Examiners (SEFE) will use the evaluation criteria in this volume to conduct all flight and emergency procedures evaluations. To ensure standard and objective evaluations, flight examiners will be thoroughly familiar with the prescribed evaluation criteria.

1.3.2. Recording devices (i.e., Airborne Video Tape Recorders, etc.) may be used to reconstruct/evaluate the mission.

1.3.3. Prior to flight, the SEFE will explain the purpose of the flight and how it will be conducted. The examinee will accomplish applicable flight planning. Higher Headquarters (HHQ) SEFEs (and unit SEFEs as determined locally) will be furnished a copy of necessary charts, flight logs, target folders and any additional items they deem necessary.

1.3.4. Required areas are shown in **Table 2.1.**. When conditions such as equipment malfunctions, operational constraints or weather preclude evaluation of a particular event in-flight, it may be evaluated in the weapon system trainer (WST) or verbally in order to complete the evaluation. Document alternate evaluation method IAW AFI 11-202V2. Activity evaluated in the WST must be simulator certified (SIMCERT) to Training Value Code (TVC) of 1. Pre-check sortie items may be used to complete incomplete student Formal Training Unit (FTU) evaluations when ATD or verbal completion is not appropriate (e.g. air refueling, visual pattern, etc.) and the pre-check was flown with a B-2 evaluator pilot. This provision only applies to areas not accomplished on the evaluation and will not be used to clear areas graded less than "Q." Specific procedures will be included in the unit supplement to AFI 11-202V2.1.3.5. The SEFE will thoroughly critique all aspects of the evaluation. During the critique, the SEFE will review the examinee's overall rating, specific deviations, area grades assigned, and any required additional training.

1.3.5. SEFEs, during any phase of the evaluation, may require the examinee to demonstrate/instruct and/or present verbal explanation of performance computations, system operation, or procedures and techniques. SEFEs will exercise sound judgment to ensure oral questions are comprehensive and pertinent to the crewmember's duties and responsibilities and will not interfere with normal mission accomplishment.

1.4. Grading Instructions. Standards and performance parameters are contained in AFI 11-202V2 and this instruction.

1.4.1. The evaluator will base tolerances for in-flight parameters on conditions of smooth air and a stable aircraft. Evaluators should allow for momentary deviations from tolerances, provided the examinee applies prompt corrective action and such deviations do not jeopardize flying safety. The evaluator will consider cumulative deviations when determining the overall grade.

1.4.2. When grading criteria requires a specific airspeed/angle of attack (AOA) be evaluated and the flight manual lists only a minimum/maximum/recommended airspeed/AOA for that area, the desired airspeed/AOA will be briefed by the examinee.

1.4.3. The SEFE will compare the examinee's performance for each area accomplished during the evaluation with the standards provided and assign an appropriate grade for the area. The overall flight evaluation grade is derived from the area grades and is based on a composite for the observed events and tasks IAW AFI 11-202V2 and this volume.

1.4.3.1. SEFEs will use the grading criteria in this volume to determine individual area grades. Judgment must be exercised when the wording of areas is subjective and when specific situations are not covered.

1.4.3.2. SEFE judgment will be the determining factor in arriving at the overall grade.

1.4.3.3. General Criteria. The following general criteria apply during all phases of flight except as noted for specific events and instrument final approaches. Airspeed and altitude tolerances are increased by 50 percent when evaluations are given in the WST.

Table 1.1. General Criteria.

Q	ALTITUDE	+/- 200 feet
	AIRSPEED	+/- 10 kts
	MACH	+/- .03
	COURSE	+/- 5 degrees/3 NM
	TACAN ARC	+/- 2 NM
	FUEL CONSUMPTION PER LEG	+/- 2,000 LBS
	FUEL REMAINING AT DEST/ARCP	+/- 4,000 LBS
	MRR/CFL	+/- 500 FT
	TAKEOFF/STOPPING/EMERGENCY STOPPING DISTANCE	+/- 500 FT
	ALL COMPUTED SPEEDS	+/- 5 KTS (+/- .03 M)
	LANDING DISTANCE	+/- 500 FT
Q-	ALTITUDE	+/- 300 feet
	AIRSPEED	+/- 15 kts
	MACH	+/- .05
	COURSE	+/- 10 degrees/5 NM
	TACAN ARC	+/- 3 NM
	FUEL CONSUMPTION PER LEG	+/- 3,000 LBS
	FUEL REMAINING AT DEST/ARCP	+/- 6,000 LBS
	MRR/CFL	+/- 800 FT
	TAKEOFF/STOPPING/EMERGENCY STOPPING DISTANCE	+/- 700 FT
	ALL COMPUTED SPEEDS	+/- 9 KTS (+/- .04 M)
	LANDING DISTANCE	+/- 1,000 FT
U	EXCEEDED Q- LIMITS	

1.5. Emergency Procedures Evaluation (EPE). All EPEs will be conducted in the WST. Only SEFEs may conduct EPEs.

   1.5.1. The following items will be included in all EPEs (except as noted):

   1.5.1.1. Aircraft General Knowledge.

   1.5.1.2. Emergency Procedures. Evaluate a minimum of two emergency procedures per phase of flight to include weapons delivery (i.e., pre-flight, takeoff, cruise and landing). All Bold Face will be evaluated.

   1.5.1.3. Terrain Following/Low Level Navigation. Evaluate in accordance with Mission Evaluation paragraphs **2.3.2.** and **2.3.3.** These are mandatory items for all CMR and/or TF qualified aircrew EPEs. Optional for BMC and BAQ aircrew EPEs.

1.5.1.4. Unusual Attitude Recoveries.

1.5.1.5. Crew Coordination.

1.5.2. The following additional items will be included on EPEs as a requisite for the instrument evaluation.

1.5.2.1. Instrument Procedures.

1.5.2.2. Holding Procedures.

1.6. Examinations:

1.6.1. Emergency Procedures Exam (Closed Book):

1.6.1.1. General Knowledge. This exam consists of at least 20 questions and includes information applicable to the individual crew position and unit mission.

1.6.1.2. Bold Face. The answer must contain all critical items in the proper sequence. Verbatim responses are not required; however, answers must clearly state the intended course of action.

1.6.2. Qualification Exam (Open Book). This exam should consist of a minimum of 100 questions derived from all flight manuals and governing command directives.

1.7. Records Disposition. Records will be disposed of IAW AFM 37-139, *Records Disposition Schedule*, Table 13-10.

CHAPTER 2

EVALUATION REQUIREMENTS

2.1. General. All evaluations will follow the guidelines set in AFI 11-202V2. Requisites are IAW AFI 11-202V2. Evaluation requirements are depicted in **Table 2.1.**.

2.1.1. Requirements. For Combat Mission Ready (CMR) aircrew and instructors to complete an evaluation, all areas annotated with an "R" must be accomplished. Basic Mission Capable (BMC) aircrew will only be evaluated on those missions routinely performed and in those areas which they are qualified to perform unsupervised. For efficiency, strive to complete all evaluation requirements on one flight.

2.1.2. Pilots will be evaluated performing duties in the left seat, while mission commanders and dual seat qualified pilots will be evaluated performing duties in the right seat. Instructor pilots may be evaluated in either seat at the discretion of the SEFE.

2.1.3. Performance and Planning Data. Examinee will be graded on the performance data actually used for takeoff.

2.1.4. Preplanned Mission Data. If any portion of mission data is "canned" by appropriate staff agencies for crew use, that portion of the data will not be graded under "mission planning." In the event that any mission data was derived by use of a command computer product, the crewmember will be responsible for the mission parameters initially input to the computer by the crewmember. The pilot in command (mission commander/instructor pilot (MC/IP) for MC/instructor evaluations; SEFE for pilot evaluations) is ultimately responsible to insure data used in the aircraft is accurate and affords effective mission accomplishment.

2.1.5. Currency of Flight Publications. Issued technical orders, including checklists, will be evaluated and graded for currency on both qualification and no-notice flight evaluations. Units may specify additional publications to be evaluated in the unit supplement to AFI 11-202V2.

2.2. Instrument/Qualification Evaluation:

2.2.1. Airwork/Advanced Handling/Tactical Maneuvering. (WST Only) Required to be evaluated for flight without instructor supervision. This area will be used for evaluating specific flight characteristics demonstration maneuvers. The pilot and mission commander must each demonstrate the ability to safely accomplish the required maneuvers in accordance with the procedures and limitations outlined in the flight manual and governing directives. Basic Aircraft Qualification (BAQ) aircrew are not required to be evaluated on the advanced handling characteristics (AHC) area.

2.2.2. Emergency Traffic Patterns:

2.2.2.1. The simulated engine loss must be given during level flight with sufficient time provided to allow completion of the emergency procedures checklist prior to final approach. All engines may be used after the go-around has been completed and a safe altitude and airspeed have been attained.

2.2.2.2. The following emergency procedures are required:

2.2.2.2.1. Simulated single engine out approach/go.

2.2.2.2.2. Simulated two engine out approach/go (EPE/WST only).

2.2.3. Touch-and-Go. Required for all qualification evaluations.

2.3. Mission Evaluation. Profiles are designed using current tactics and unit taskings and will incorporate all appropriate evaluation requirements in **Table 2.1.**. Mission evaluations will reflect real-world threats and threat avoidance to the greatest extent possible; weather and flight conditions permitting. These evaluations will demonstrate the individual's ability to accomplish any unit combat tasking to include special missions. The crewmember will demonstrate defensive/evasive action bombing and emission control (EMCON) to the maximum extent possible. On missions when special mission instructions (SPINS) are not available or used, use command guidance from appropriate regulations.

2.3.1. Air Refueling. The air refueling evaluation will include air refueling communication, rendezvous (point parallel or en route), aircraft control, descent, contact, fuel management and transfer, visual signals (may be done orally if necessary), post refueling, and breakaway (air refueling practice emergency separation procedures must be initiated with the receiver in the refueling envelope).

2.3.1.1. Refueling may be day or night and there are no weight requirements. Boom Limit demonstrations should be accomplished during day refueling.

2.3.1.2. Air refueling tracks should be of sufficient length to allow 30 minutes of air refueling. Deviations from this requirement are permissible when tanker/receiver formation ratio or length of the published air refueling track prohibits compliance.

2.3.1.3. Ten minutes of contact time (initial qual checks 15 minutes) must be completed within 30 minutes after initial pre-contact position.

2.3.2. Low Level Navigation (If Applicable). Proficiency will be demonstrated by flying an approved low altitude navigation route planned in accordance with applicable directives. Emission control, terrain masking, and threat avoidance (when applicable) will be demonstrated to the maximum extent possible. Deviations from course to avoid weather or when maneuvering to avoid simulated threats are acceptable and encouraged; however, they must be accomplished within the corridor limits of FLIP AP/1B.

2.3.3. Terrain Following (If Applicable). Aircrew will be graded in this area when low level is flown at TF clearance plane altitudes. A minimum of two navigation legs must be evaluated using the TF system as the primary means for maintaining altitude clearance.

2.3.4. Weapons Employment. As a minimum, a single nuclear bomb run or single conventional weapon release/bomb run should be accomplished. The conventional weapon release must include the GATS tactic, either auto or manual, unless an actual weapon is being dropped.

2.3.4.1. The intent is to schedule and demonstrate procedures and techniques for a mixed load of weapons. However, the evaluation may be completed when any type bomb run/weapon release is accomplished. Each bomb run/weapon release must result in a simulated/actual release of a weapon. Alternate methods of bombing may be used as equipment malfunctions dictate and will satisfy the requirements of the evaluation. Accomplish bomb run/weapon release using delivery tactics as specified in AFTTP 3-1, *Air Force Tactics, Techniques, and Procedures*. When weather or equipment malfunctions preclude accomplishing low altitude bomb runs (if applicable) at TF clearance plane altitudes, the bomb runs may be completed at IFR altitude.

2.3.4.2. Heading tolerances will be from mission directives (e.g., SPINS) or governing directives whichever is more restrictive. Heading must be evaluated at release of the first weapon by comparing the planned heading versus actual and HSI heading to ensure prescribed tolerances are met. Both lower and upper (if applicable) altitude parameters for conventional weapons must be met. Airspeed will be graded through the release of all weapons.

2.4. Instructor Evaluation:

2.4.1. All instructors/instructor candidates must be evaluated to determine judgment, technical knowledge, instructor ability (including error analysis of student activity), use of grading documents, and proficiency in their aircrew specialty. Instructors/instructor candidates must demonstrate their ability to instruct while performing all instructor proficiency items.

2.4.2. Instructor evaluations may be taken in conjunction with qualification/instrument/mission evaluations. Initial instructor evaluations may be taken separately. Student briefing and proficiency/instructor abilities subareas must be evaluated during all instructor evaluations. Mission Commanders receiving initial instructor evaluations should occupy the right seat for evaluation. On recurring instructor evaluations, IPs may occupy either seat.

2.4.3. Air Refueling. Receiver instructor pilots must demonstrate envelope limits. Inadvertent disconnect tolerances are not applicable during demonstration of boom envelope limits. Contact time may be reduced to 5 minutes excluding the time required to demonstrate boom envelope limits.

2.4.4. Instructor Demonstrations. All special maneuvers will be evaluated in flight on initial instructor evaluations.

2.5. Difference Requirements (If Applicable). Individuals qualifying in a different area, tactic, weapon, or weapon system must complete the training required by governing directives and receive a Difference Certificate. If appropriate, prior to receipt of a difference certification, the individual must complete emergency procedures and qualification examinations covering the new items and demonstrate proficiency to a qualified instructor pilot. A weapon preflight may be required for any changes in unit tasking. If an inflight evaluation is required, a new AF Form 8, **Certificate of Aircrew Qualification**, will be completed. If an inflight evaluation is not required, certify individual's new qualification level on unit Letter of X's and individual's training folder, as appropriate.

2.6. Dual Seat Qualification (If Applicable). Dual-seat qualified mission commanders will take their recurring evaluations in the right seat.

Table 2.1. Evaluation Requirements.

AREA	NOTES	AREA TITLE	INSTM/ QUAL	MSN
GENERAL				
1		FLIGHT PUBLICATIONS	R	
2		MISSION PLANNING	R	R
3		BRIEFING (if applicable)	R	R
4		PRETAKEOFF	R	R
5		TAKEOFF	R	
6		DEPARTURE	R	
7		LEVEL-OFF	R	
8		CRUISE/NAVIGATION	R	
9		FORMATION		
10		IN-FLIGHT CHECKS	R	
11		EQUIPMENT OPERATION	R	R
12		COMM/IFF/SIF	R	R
13	(WST ONLY)	AIRWORK/ADVANCED HANDLING/TACTICAL MANEUVERING	R	
14		CREW COORDINATION	R	R
15		AIR REFUELING		R
16		DESCENT	R	
17		GO-AROUND	R	
18	1	EMERGENCY TRAFFIC PATTERNS	R	
19	2, 5	VFR/CLOSED PATTERN/APPROACH	R	
20		LANDING	R	
21		AFTER LANDING	R	
22		DEBRIEF/CRITIQUE	R	R
23		KNOWLEDGE	R	R
24	*	AIRMANSHIP	R	R
25	*	SAFETY	R	R
26	*	AIRCREW DISCIPLINE	R	R
27		INSTRUCTOR PERFORMANCE	R	R
28-30		NOT USED		
INSTRUMENT				
31	1	HOLDING	R	
32		PENETRATION/ENROUTE DESCENT	R	

AREA	NOTES	AREA TITLE	INSTM/ QUAL	MSN
33	3	INSTRUMENT APPROACHES	R	
34	4	PRECISION APPROACH	R	
35		NONPRECISION APPROACH	R	
36		MISSED APPROACH/CLIMB-OUT	R	
37		CIRCLING/SIDE-STEP APPROACH		
38		INSTRUMENT CROSS-CHECK		
39-40		NOT USED		
		TACTICAL EMPLOYMENT		
41		TACTICAL PLAN		R
42		TACTICAL EXECUTION (WST Only)		R
43		GCI/AWACS/COMPOSITE FORCE INTERFACE		
44		RADIO TRANSMISSION/INTERPHONE USAGE		R
45		INGRESS		R
46		LOW ALTITUDE NAVIGATION		
47		TERRAIN FOLLOWING		
48		WEAPONS EMPLOYMENT		R
49		RANGE/ESS PROCEDURES		
50		EGRESS		R
51		TRAINING RULES/ROE		R
52-60		NOT USED		

* Indicates Critical Area.

NOTES:

1. May be accomplished in the WST. Loss of engines/systems in the WST should not be simulated during emergency procedures. Can take credit for this event if in flight loss of engine(s) occur and approaches are flown to a full stop.

2. Either a VFR or closed pattern is required.

3. Instructor evaluations require a minimum of one approach.

4. If a PAR or an ILS is not available then SILS may be substituted.

5. For recurring checks only, if the visual pattern cannot be accomplished due to weather, the evaluation can be considered complete.

CHAPTER 3

EVALUATION CRITERIA

3.1. General Grading Standards:

3.1.1. The grading criteria in this chapter are divided into three sections: General, Instrument, and Tactical Employment. Use all sections for criteria applicable to the events performed on the evaluation.

3.1.2. Areas marked (MC) are for mission commanders and areas marked (P) are for pilots only. All other areas are common to all aircrews.

3.1.3. Where major areas are divided into subareas, only one grade will be assigned to the major areas. Discrepancies on the back of the AF Form 8 will be annotated by subarea.

3.2. General:

3.2.1. Area 1--Flight Publications:

3.2.1.1. Q. Assigned flight publications were current and contained only minor annotation or filing discrepancies.

3.2.1.2. Q-. Assigned flight publications contained deviations, omissions and /or errors. However, they contained the information necessary for effective mission accomplishment of all phases of the mission and did not compromise safety of flight.

3.2.1.3. U. Contained major deviations, omissions and/or errors. Required information was not available.

NOTE: The mission commander is responsible for compliance with the compartment requirement of AFI 11-215 and command supplements, and will be graded appropriately if non-compliant.

3.2.2. Area 2--Mission Planning:

3.2.2.1. Q. Developed a sound plan to accomplish the mission. Accurately and efficiently accomplished mission preparation. Checked all factors applicable to flight in accordance with applicable directives. Aware of alternatives available, if flight could not be completed as planned. Read and initialed for all items in the Flight Crew Information File (FCIF)/Read Files.

3.2.2.2. Q-. Same as above, except minor deviations, omissions, and/or errors that did not detract from mission effectiveness. Knowledge of performance capabilities or approved operating procedures/rules was marginal in some areas.

3.2.2.3. U. Major deviations, omissions, and/or errors that would preclude safe or effective mission accomplishment. Displayed faulty knowledge of operating data or procedures. Did not sign off FCIF prior to flight.

3.2.3. Area 3--Briefing:

3.2.3.1. Organization:

3.2.3.1.1. Q. Well organized and presented in a logical sequence. Concluded briefing in time to allow for formation briefing (if applicable).

3.2.3.1.2. Q-. Events out of sequence, hard to follow, some redundancy.

3.2.3.1.3. U. Disorganized. Illogical sequence during presentation caused confusion. Did not allow time for formation briefing (if applicable).

3.2.3.2. Presentation:

3.2.3.2.1. Q. Presented briefing in a professional manner, well organized and in a logical sequence. Flight/crew members clearly understood mission requirements.

3.2.3.2.2. Q-. Dwelled on non-essential mission items.

3.2.3.2.3. U. Presentation created doubts or confusion.

3.2.3.3. Mission Objectives:

3.2.3.3.1. Q. Established objectives for the mission. Presented all training events and effectively addressed methods for accomplishing the mission.

3.2.3.3.2. Q-. Objectives undefined and poorly quantified. Omitted minor training events. Limited discussion of techniques.

3.2.3.3.3. U. Did not establish objectives for the mission. Omitted major training events or did not discuss techniques.

3.2.3.4. Flight/Crew Member Consideration:

3.2.3.4.1. Q. Considered the abilities of all flight/crew members. Briefed corrective action from previous mission and probable problem areas when appropriate.

3.2.3.4.2. Q-. Did not consider all flight/crew members' abilities. Did not identify possible problem areas.

3.2.3.4.3. U. Ignored flight/crew members' abilities and past problem areas.

3.2.4. Area 4--Pre-Takeoff: (Includes all activity up to crossing the hold line).

3.2.4.1. Q. Established and adhered to station, start engine, taxi times to assure thorough preflight, check of personal equipment, crew briefing, etc. Performed all checks and procedures prior to takeoff in accordance with approved checklists and applicable directives. Deviations occurred as a result of moving to another piece of equipment while awaiting timeout.

3.2.4.2. Q-. Minor deviations, omissions, and/or errors occurred which did not detract from mission effectiveness or performance and/or knowledge was the minimum acceptable and indicated a definite need for assigned study and/or additional training.

3.2.4.3. U. Omitted major item(s) of the appropriate checklist. Major deviations in procedure, which would preclude safe mission accomplishment. Failed to accurately determine readiness of aircraft for flight. Crew errors directly contributed to a late takeoff, which degraded the mission or made it non-effective.

3.2.5. Area 5--Takeoff. Includes all activity from initiation of takeoff checklist up to and including establishing climb configuration and airspeed.

3.2.5.1. Q. Accomplished prescribed procedures and checklists in accordance with the flight manual and governing directives. Smooth aircraft control throughout takeoff. Performed takeoff in accordance with flight manual procedures. Airspeeds were within tech order tolerances.

3.2.5.2. Q-. Minor flight manual procedural or technique deviations. Some under or over control at liftoff.

3.2.5.3. U. Lift-off potentially dangerous. Exceeded aircraft/systems limitations. Failed to establish proper climb attitude. Over-controlled aircraft resulting in excessive deviations from intended flight path.

3.2.6. Area 6--Departure: (Includes the portion of flight after establishing climb configuration and airspeed up to, but not including, level-off.)

3.2.6.1. Q. Performed departure as published/directed and complied with all restrictions. Accomplished procedures and checklists required by the flight manual and governing directives accurately and efficiently.

3.2.6.2. Q-. Minor deviations in airspeed and navigation occurred during completion of departure. Minor omissions, deviations, and/or errors in procedures detracted from overall mission efficiency.

3.2.6.3. U. Failed to comply with published/directed departure instructions. Major omissions, deviations, and/or errors in procedures.

3.2.7. Area 7--Level-off. This area does not include level-offs during instrument departures, penetrations, en route descents and traffic patterns.

3.2.7.1. Q. Leveled off smoothly. Promptly established proper cruise airspeed.

3.2.7.2. Q-. Level-off was erratic. Slow in establishing proper cruise airspeed.

3.2.7.3. U. Level-off was extremely erratic. Excessive delay or failed to establish proper cruise airspeed. Failed to reset altimeter, as required.

3.2.8. Area 8--Cruise/Navigation: (Includes all high altitude flight.)

3.2.8.1. Q. Demonstrated satisfactory capability to navigate using all available means. Used appropriate navigation procedures. Complied with clearance instructions. Aware of position at all times. Remained within the confines of assigned airspace (i.e., MOA, restricted area, etc.). Made all control times, to include weapon release times, within published or briefed tolerances. At no time allowed the aircraft to deviate more than ten nautical miles from planned course. Fix- to-Fix +/- 2 NM.

3.2.8.2. Q-. Minor errors in procedures or use of navigation equipment. Slow to comply with clearance instructions. Had some difficulty in establishing exact position and course. Performance demonstrated a lack of knowledge or ability that could have affected mission accomplishment. Fix- to- Fix +/-4 NM.

3.2.8.3. U. Major errors in procedures or use of navigation equipment. Could not establish position. Failed to recognize checkpoints or adjust for deviations in time and course. Did not remain within the confines of assigned airspace. Exceeded parameters for Q-.

3.2.9. Area 9--Formation:

3.2.9.1. Flight Lead:

3.2.9.1.1. Q. Established and maintained appropriate formations utilizing published and briefed procedures. Positive control of flight/element during mission. Planned ahead and made timely decisions.

3.2.9.1.2. Q-. Limited flight management. Not unsafe, but made it difficult for wingman to maintain position. Did not always plan ahead and/or was hesitant in making decisions. Delayed mission accomplishment or degraded training. Minor deviations in procedure.

3.2.9.1.3. U. Did not establish appropriate formations. Little consideration for wingman. Major deviations in procedures. Indecisive. Placed wingman in unsafe position or circumstance. Did not accomplish the mission or failed to correct in-flight discrepancies. Failed to ensure wingman maintained proper position.

3.2.9.2. Wingman:

3.2.9.2.1. Q. Was able to maintain position with only momentary deviations. Maintained safe separation and complied with procedures. Smooth, timely join-up. Made smooth and immediate position corrections.

3.2.9.2.2. Q-. Position varied considerably. Some procedural deviations. Over-controlled. Slow to join-up.

3.2.9.2.3. U. Unable to maintain proper formation position. Unsafe join-up or procedures. Abrupt position corrections. Did not maintain safe separation.

3.2.10. Area 10--In-flight Checks:

3.2.10.1. Q. Performed all in-flight checks as required.

3.2.10.2. Q-. Minor deviations, errors or omissions during checks. Performance and/or knowledge was the minimum acceptable and indicated a definite need for assigned study and/or additional training.

3.2.10.3. U. Did not perform in-flight checks or monitor systems to the degree that an unsafe situation could have developed if allowed to continue uncorrected.

3.2.11. Area 11--Equipment Operation. This area includes the individual's systems knowledge and proper equipment operating procedures. Evaluate fuel management, aircraft and/or systems operation in this area. It does not include emergency/abnormal procedures.

3.2.11.1. Q. Operated equipment according to procedures and checklists contained in the flight manuals and governing directives. Accurately and efficiently analyzed equipment malfunctions with consistent reliable mission results. No damage or significant system degradation resulted from operator inputs or lack of knowledge.

3.2.11.2. Q-. Operated equipment with minor deviations, omissions, and/or errors from procedures required by the flight manual or governing directives. Equipment malfunctions were consistently ignored, analyzed in error, or caused by erroneous data insertion or faulty operator techniques. Deviations, omissions, and/or errors in malfunction analysis, prescribed procedures, or faulty techniques caused a degradation of equipment performance. The level of performance or knowledge consistently resulted in marginal reliability. Did not damage equipment.

3.2.11.3. U. Equipment damage may have resulted due to circumstances within operator's control. Unable to recognize a major equipment malfunction. Unable to obtain acceptable results due to poor operational techniques or procedures.

3.2.12. Area 12--Communications/IFF/SIF. Area includes interphone, AFSATCOM/MILSTAR, UHF/VHF and HF radio, authentication, IFF, command and control, and other pertinent requirements. This area is not used for grading ATC clearances, ATC communication, or air refueling interplane communications.

3.2.12.1. Q. Complete knowledge of and compliance with correct Communication/IFF/SIF procedures. Transmissions concise with proper terminology. Complied with and acknowledged all required instructions.

3.2.12.2. Q-. Occasional deviations from correct procedures that required retransmissions or resetting codes. Slow in initiating required actions. Transmissions contained extraneous matter, were not in proper sequence, or nonstandard terminology used.

3.2.12.3. U. Incorrect procedures or poor performance precluded mission accomplishment or jeopardized safety. Failed to submit a required report.

3.2.13. Area 13--Airwork/Advanced Handling/Tactical Maneuvering:

3.2.13.1. Q. Aircraft control during maneuvers was positive and smooth. Maneuvers performed IAW directives and appropriate to the tactical situation/environment. Adhered to established procedures.

3.2.13.2. Q-. Aircraft control during maneuvers not always smooth and positive, but adequate. Minor procedural deviations or lack of full consideration for tactical situation.

3.2.13.3. U. Aircraft control erratic. Aircraft handling caused unsatisfactory accomplishment of maneuvers. Failed to consider the tactical situation. Temporary loss of aircraft control.

3.2.14. Area 14--Crew Coordination/CRM: Mission Commander/IP supervision of pilot activities (for example, takeoffs, landings, touch and go, receiver air refueling, etc.) will be graded under crew coordination. For further guidance see AFI 11-290, *Cockpit/Crew Resource Management Training Program*; and AF Form 4031, *CRM Skills Training/Evaluation Form.*

3.2.14.1. Q. Coordinated effectively with crewmember during all phases of the mission as required by the flight manual and governing directives incurring only minor delays, misunderstandings, or confusion. Effective use of CRM techniques.

3.2.14.2. Q-. Coordination was lacking to the extent that actions required by the flight manual and governing directives were omitted, causing delays or confusion which indicated a definite need for study and/or additional training. CRM techniques were the minimum acceptable.

3.2.14.3. U. Demonstrated ineffective coordination with other crewmember. CRM techniques were lacking to the extent the mission accomplishment was severely degraded. Created confusion or delays that could have endangered the aircraft or prevented reliable weapon delivery.

3.2.15. Area 15--Air Refueling:

3.2.15.1. Air Refueling Rendezvous:

3.2.15.1.1. Q. Rendezvous accomplished using proper procedures. Effective use of radio communications.

3.2.15.1.2. Q-. Rendezvous delayed by improper techniques, procedures, or radio communications.

3.2.15.1.3. U. Spent excessive time in trail, excessive rendezvous delay or safety of flight jeopardized. Made an actual or attempted rendezvous with the wrong aircraft, or the individual was unable to find the correct tanker in multi-aircraft refueling.

3.2.15.2. Air Refueling Procedures:

3.2.15.2.1. Q. Used proper procedures. Initiated appropriate rate of closure to affect an expeditious rejoin from the precontact to the contact position. Aircraft control was smooth and positive during tanker rendezvous and refueling. Refueled with no more than three (two for recurring checks) pilot-induced disconnects.

3.2.15.2.2. Q-. Used proper procedures. Initiated excessively slow or stagnated closure from the precontact to the contact position. Rough aircraft control during rendezvous and refueling. Refueling with no more than four (three for recurring checks) pilot-induced disconnects.

3.2.15.2.3. U. Used unacceptable procedures. Excessive time to affect closure from the precontact to the contact position delayed mission accomplishment. Unable to maintain contact position. Caused more than four (three for recurring checks) pilot-induced disconnects. Unable to safely accomplish air refueling.

3.2.16. Area 16--Descent. This area includes all activity from departing cruise altitude for entry into low level operations, initial penetration, or en route descent to completion of descent at final approach fix or level off at planned IFR altitude.

3.2.16.1. Q. Performed descent as directed, complied with all restrictions. Accomplished procedures and checklists required by the flight manual and governing directives accurately and efficiently.

3.2.16.2. Q-. Performed descent as directed with minor deviations. Accomplished procedures and checklists required by the flight manual and governing directives with minor omissions, deviations, or errors.

3.2.16.3. U. Performed descent with major deviations. Procedures were accomplished with major deviations, omissions, and/or errors demonstrating unacceptable knowledge/performance of the flight manual or governing directives.

3.2.17. Area 17--Go-Around:

3.2.17.1. Q. Initiated and performed go-around promptly in accordance with manual and operational procedures and directives. Airspeed tolerances are: +/-10 KIAS

3.2.17.2. Q-. Slow to initiate go-around or procedural steps. Airspeed tolerances are: +/-15 KIAS

3.2.17.3. U. Did not self-initiate go-around when appropriate or directed. Techniques unsafe or applied incorrect procedures. Erratic aircraft control. Large deviations in runway alignment.

3.2.18. Area 18--Emergency Traffic Patterns:

3.2.18.1. Q. Performed emergency procedures IAW applicable directives. Able to prioritize actions to safely recover the aircraft. Maintained aircraft control within appropriate standards. Airspeed tolerances are: + 10/- 5 KIAS.

3.2.18.2. Q-. Performed emergency procedures with minor deviations, omissions, and/or errors from applicable directives, did not jeopardize the safe recovery of the aircraft. Airspeed tolerances are: + 15/- 10 KIAS.

3.2.18.3. U. Performed emergency procedures with major deviations, omissions, and/or errors. Unable to safely recover the aircraft.

3.2.19. Area 19--VFR Pattern/Approach:

3.2.19.1. Q. Performed patterns/approaches IAW procedures outlined in the flight manual, operational procedures, and local directives. Aircraft control was smooth and positive. Accurate runway alignment. Maintained proper or briefed airspeed. Airspeed tolerances are: +10/-5 knots.

3.2.19.2. Q-. Performed patterns/approaches with minor deviations to procedures outlined in the flight manual, operational procedures and local directives. Aircraft control was not consistently smooth, but safe. Variations in runway alignment. Slow to correct to proper or briefed airspeed. Airspeed tolerances are: +15/-10 knots.

3.2.19.3. U. Approaches not performed IAW procedures outlined in the flight manual, operations procedures, and local directives. Erratic aircraft control. Large deviations in runway alignment.

3.2.20. Area 20--Landing. Includes all activity from MDA or DH through landing/go-around. Touch-and-go procedures are graded under this area. This area includes initiation of appropriate landing checklist.

3.2.20.1. Q. Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives. Aircraft control was smooth and positive. Accurate runway alignment.

3.2.20.2. Q-. Performed landings IAW procedures outlined in the flight manual, operational procedures, and local directives with minor deviations, omissions, and/or errors, which did not jeopardize safety of flight. Aircraft control was rough however, runway alignment was accomplished.

3.2.20.3. U. Landing not performed IAW procedures outlined in the flight manual, operational procedures and local directives. Failed to ensure the aircraft was in a safe landing configuration.

3.2.21. Area 21--After Landing. This area includes use of checklists, taxiing, parking, shutdown and completion of forms and reports. All mission data will be available for grading.

3.2.21.1. Q. Appropriate after-landing checks and aircraft taxi procedures accomplished in accordance with the flight manual and applicable directives. Completed all required forms accurately.

3.2.21.2. Q-. Same as qualified except some deviations or omissions noted in performance of after-landing check and/or aircraft taxi procedures. Safety was not jeopardized. Required forms completed with minor deviations, omissions, and/or errors.

3.2.21.3. U. Major deviations, omissions, and/or errors were made in performance of after-landing check or aircraft taxi procedures, which could have jeopardized safety. Data recorded inaccurately or omitted.

3.2.22. Area 22--Debrief/Critique. Convened by the pilot in command (mission commander for MC checks; SEFE for pilot checks) as soon as practical after flight. The mission will be reviewed and areas of crew coordination discussed in order to establish methods and/or actions required to improve crew coordination.

3.2.22.1. Q. Flight was critiqued in an orderly manner. All portions of the mission were reviewed with reference to the mission objectives with only minor omissions. Incorrect procedures were discussed and appropriate action taken to prevent recurrence.

3.2.22.2. Q-. Flight was critiqued in a haphazard manner. Little or no reference to the mission objectives. Critique of incorrect procedures or analysis was incomplete or incorrect. Critique indicated a definite need for study and/or additional training.

3.2.22.3. U. Critique was omitted.

3.2.23. Area 23--Knowledge:

3.2.23.1. Emergency Procedures:

3.2.23.1.1. Q. Correct, immediate response to Bold Face and non-Bold Face emergency situations. Effectively used checklist/flight manual.

3.2.23.1.2. Q-. Response to certain areas of non-Bold Face emergencies or follow-on steps to Bold Face procedures was slow/confused. Used the checklist/flight manual when appropriate, but slow to locate required data.

3.2.23.1.3. U. Incorrect response to Bold Face emergency situations. Unable to analyze problems or take corrective action. Did not use checklist/flight manual, or lacks acceptable familiarity with its arrangement or contents.

3.2.23.2. Flight Rules/Procedures:

3.2.23.2.1. Q. Thorough knowledge of flight rules and procedures. Thorough knowledge of local area procedures.

3.2.23.2.2. Q-. Deficiencies in depth of knowledge. Limited knowledge of local area procedures.

3.2.23.2.3. U. Inadequate knowledge of flight rules and procedures. Inadequate knowledge of local area procedures.

3.2.24. Area 24--Airmanship (Critical):

3.2.24.1. Q. Executed the mission in a timely, efficient manner. Demonstrated a keen sense of situational awareness. Conducted the flight with a sense of understanding and comprehension.

3.2.24.2. U. Decisions or lack thereof resulted in failure to accomplish the assigned mission. Demonstrated poor judgment or situational awareness to the extent that safety could have been compromised. Resources were not always effectively used to the extent that specific mission objectives were not achieved.

3.2.25. Area 25--Safety (Critical):

3.2.25.1. Q. Aware of and complied with all safety factors required for safe operation of the aircraft and mission accomplishment.

3.2.25.2. U. Was not aware of or did not comply with all safety factors required for safe operations or conduct of the mission. Failed to correctly accomplish Boldface procedures. Operated the aircraft or equipment in a dangerous manner.

3.2.26. Area 26--Aircrew Discipline (Critical):

3.2.26.1. Q. Demonstrated professional flight and crew discipline throughout all phases of the mission.

3.2.26.2. U. Failed to exhibit flight or crew discipline. Violated or ignored rules or regulations.

3.2.27. Instructor Performance:

3.2.27.1. Briefing/Debrief:

3.2.27.1.1. Q. Presented a comprehensive instructional briefing/critique which encompassed all mission events. Made good use of training aids. Analysis of events/maneuvers were sound. Clearly defined objectives.

3.2.27.1.2. Q-. Minor errors or omissions in briefing/debriefing or mission critique. Occasionally unclear in analysis of events or maneuvers.

3.2.27.1.3. U. Major errors or omissions in briefing/debriefing. Analysis of events or maneuvers was incomplete, inaccurate, or confusing. Did not use training aids/reference material effectively. Failed to define mission objectives.

3.2.27.2. Demonstration of Maneuvers/Equipment Operation:

3.2.27.2.1. Q. Performed required maneuvers or procedures within prescribed parameters. Provided concise, meaningful in-flight commentary. Demonstrated sound instructor proficiency.

3.2.27.2.2. Q-. Performed required maneuvers or procedures with minor deviations from prescribed parameters. In-flight commentary was sometimes unclear.

3.2.27.2.3. U. Was unable to properly perform required maneuvers or procedures. Made major procedural errors. Did not provide in-flight commentary.

3.2.27.3. Instructor Knowledge:

3.2.27.3.1. Q. Demonstrated in-depth knowledge of procedures, requirements, aircraft systems/performance characteristics, mission, weapons employment, and tactics.

3.2.27.3.2. Q-. Deficiencies noted in the depth of knowledge, comprehension of procedures, requirements, aircraft systems/performance characteristics, mission, weapons employment, or tactics.

3.2.27.3.3. U. Unfamiliar with procedures, requirements, aircraft systems/performance characteristics, mission, weapons employment, or tactics. Lack of knowledge in certain areas seriously detracted from instructor effectiveness.

3.2.27.4. Training Forms Preparation:

3.2.27.4.1. Q. Completed appropriate training records accurately. Adequately assessed and recorded performance. Comments were clear and pertinent.

3.2.27.4.2. Q-. Minor errors or omissions in training/evaluation records. Comments were incomplete or slightly unclear.

3.2.27.4.3. U. Did not complete required forms or records. Comments were invalid, unclear, or did not accurately document performance.

3.2.27.5. Ability to Instruct:

3.2.27.5.1. Q. Demonstrated sound instructor ability. Clearly defined all mission requirements and any required additional training/corrective action. Instruction/evaluation was accurate, effective, and timely. Was completely aware of aircraft/mission situation at all times.

3.2.27.5.2. Q-. Problems in communication or analysis degraded effectiveness of instruction/ evaluation.

3.2.27.5.3. U. Demonstrated inadequate ability to instruct/evaluate. Unable to perform, teach, or assess techniques, procedures, systems use, or tactics. Did not remain aware of aircraft/mission situation at all times.

3.2.28. Areas 28 through 30. Not used.

3.3. Instrument:

3.3.1. Area 31--Holding:

3.3.1.1. Q. Entry and holding procedures IAW applicable directives. Holding pattern limit exceeded by not more than:

3.3.1.1.1. Leg Timing +/- 15 seconds

3.3.1.1.2. TACAN +/- 2 NM

3.3.1.2. Q-. Holding pattern limit exceeded by not more than:

3.3.1.2.1. Leg Timing +/- 20 seconds

3.3.1.2.2. TACAN +/- 3 NM

3.3.1.3. U. Holding was not IAW published procedures and directives. Exceeded criteria for "Q-" or holding pattern limits.

3.3.2. Area 32--Instrument Penetration/En Route Descent:

3.3.2.1. Q. Performed the penetration/enroute descent and approach as published/directed and IAW applicable flight manuals. Complied with all restrictions. Made smooth and timely corrections.

3.3.2.2. Q-. Performed the penetration/enroute descent and approach with minor deviations. Complied with all restrictions. Slow to make corrections.

3.3.2.3. U. Performed the penetration/enroute descent and approach with major deviations. Erratic corrections.

3.3.3. Area 33-Non-Precision Approach:

3.3.3.1. Q. Adhered to all published/directed procedures and restrictions. Used appropriate descent rate to arrive at MDA at or before VDP/MAP. Position would have permitted a safe landing.

3.3.3.1.1. Airspeed +10/-5 kts

3.3.3.1.2. Heading ±5 degrees (ASR)

3.3.3.1.3. Course ±5 degrees at MAP

3.3.3.1.4. Localizer less than one dot deflection

3.3.3.1.5. Minimum Descent Altitude +100/-0 feet

3.3.3.1.6. Timing +/-10 secs

3.3.3.2. Q-. Performed approach with minor deviations. Arrived at MDA at or before the MAP, but past the VDP. Position would have permitted a safe landing.

3.3.3.2.1. Airspeed +15/-10 kts

3.3.3.2.2. Heading ±10 degrees (ASR)

3.3.3.2.3. Course ±10 degrees at MAP

3.3.3.2.4. Localizer within two dot deflection

3.3.3.2.5. Minimum Descent Altitude +150/-50 feet

3.3.3.2.6. Timing +/- 20 secs

3.3.3.3. U. Did not comply with published and directed procedures or restrictions. Maintained steady-state flight below the MDA. Could not land safely from the approach.

NOTE: The -50 foot tolerance applies only to momentary deviations.

3.3.4. Area 34--Precision Approach:

3.3.4.1. Q. Performed procedures as directed and IAW applicable flight manual. Smooth and timely response to controller's instructions. Initiated appropriate action at decision height. Position would have permitted a safe landing. Maintained glide path with only minor deviations.

3.3.4.1.1. Airspeed +10/-5 kts

3.3.4.1.2. Heading within 5 degrees of controller's instructions (PAR)

3.3.4.1.3. Glide Slope/Azimuth within one dot (ILS/SILS)

3.3.4.2. Q-. Performed procedures with minor deviations. Slow to respond to controller's instructions. Position would have permitted a safe landing. Improper glide path control. Initiated appropriate action at Decision Height +/- 50 feet.

3.3.4.2.1. Airspeed +15/-10 kts

3.3.4.2.2. Heading within 10 degrees of controller's instructions (PAR)

3.3.4.2.3. Glide Slope within one dot low/two dots high (ILS/SILS)

3.3.4.2.4. Azimuth within two dots (ILS/SILS)

3.3.4.3. U. Performed procedures with major deviations. Erratic corrections. Did not respond to controller's instructions. Erratic glide path control. Did not initiate appropriate action at decision height and/or position would not have permitted a safe landing.

3.3.5. Area 35--Missed Approach/Climb-Out:

3.3.5.1. Q. Executed missed-approach/climb-out as published/directed. Completed all procedures IAW applicable flight manual.

3.3.5.2. Q-. Executed missed approach/climb-out with minor deviations. Slow to comply with published procedures, controller's instructions, or flight manual procedures.

3.3.5.3. U. Executed missed-approach/climb-out with major deviations, or did not comply with applicable directives.

3.3.6. Area 36--Circling/Side-Step Approach:

3.3.6.1. Q. Performed circling/side-step approach in accordance with procedures outlined in the flight manual and directives. Aircraft control was positive and smooth. Proper runway alignment. Airspeed tolerances are: +10/-5 KIAS.

3.3.6.2. Q-. Performed circling/side-step approach with minor deviations to procedures outlined in the flight manual and directives. Aircraft control was not consistently smooth, but safe. Variations in runway alignment, but go-around not required. Airspeed tolerances are: +15/-10 KIAS.

3.3.6.3. U. Circling/side-step approach not performed in accordance with procedures outlined in the flight manual and directives. Erratic aircraft control. Large deviations in runway alignment requiring go-around.

3.3.7. Area 37—National Airspace System (NAS) Flight Operations Compliance:

3.3.7.1. Q. Complied with safe maneuvering speeds below 10,000 feet MSL and NAS mission planning and flight operations guidance contained in FLIP, T.O. 1B-2A-1, AFI 11-2B-2V3, and MAJCOM directives. Accomplished adequate review of conflicting Military Training Routes for the type of mission flown.

3.3.7.2. Q-. Minor deviations in maintaining safe maneuvering speeds below 10,000 feet MSL. Minor omissions, deviations, and/or errors detracted from ability to comply with NAS mission planning and flight operations guidance. Inadequate review of conflicting Military Training Routes for the type of mission flown.

3.3.7.3. U. Failed to comply with safe maneuvering speeds below 10,000 feet MSL and NAS mission planning and flight operations guidance. Failed to review conflicting Military Training Routes.

3.3.8. Areas 38 through 40. Not used.

3.4. Tactical Employment:

3.4.1. Area 41--Tactical Plan:

3.4.1.1. Q. Well-developed plan that included consideration of mission objectives, the threat, and capabilities of all flight members. Addressed contingencies in development of plan.

3.4.1.2. Q-. Minor deviations, omissions, and/or errors in the plan resulted in less than optimum achievement of objectives and detracted from mission effectiveness. Planned tactics resulted in unnecessary difficulty.

3.4.1.3. U. Major errors in the plan precluded accomplishment of the stated objective.

3.4.2. Area 42--Tactical Execution: (WST Only)

3.4.2.1. Q. Applied tactics consistent with the threat, current directives, and good judgment. Executed the plan and achieved mission goals. Quickly adapted to changing environment. Maintained situational awareness. Threat reactions were timely and correct. Equipment settings during the threat area penetration were in accordance with SIOP/UNIT procedures.

3.4.2.2. Q-. Applied tactics with only minor deviations, omissions, and/or errors which degraded the reliable release of weapons or mission effectiveness but did not prevent the successful accomplishment of the overall mission goal. Slow to react to a changing environment. Situational awareness and timely threat reactions were poor.

3.4.2.3. U. Unable to accomplish the mission due to major errors or omissions during execution of the tactical plan. Situational awareness lost. Numerous threat reactions were omitted or incorrect. Failed to accomplish countermeasures or perform maneuvers to counter threat.

3.4.3. Area 43--GCI/AWACS/Composite Force (CF) Interface:

3.4.3.1. Q. Effectively planned for and used GCI/AWACS/CF to enhance mission and achieve objectives. No confusion between GCI/AWACS/CF and bombers.

3.4.3.2. Q-. Minor confusion between GCI/AWACS/CF and bombers. Less than optimum use of GCI/AWACS/CF, which did not affect the bomber's offensive advantage.

3.4.3.3. U. Inadequate or incorrect use of GCI/AWACS/CF resulted in loss of offensive potential.

3.4.4. Area 44--Radio Transmission/Interphone-Usage and Discipline:

3.4.4.1. Q. Communications (both inter- and intra-cockpit) were concise, accurate, and effectively used to direct maneuvers or describe the tactical situation.

3.4.4.2. Q-. Minor terminology errors or omissions occurred, but did not significantly detract from situational awareness, mutual support or mission accomplishment. Extraneous comments over radios/interphone presented minor distractions.

3.4.4.3. U. Communications over radios/interphone were inadequate or excessive. Inaccurate or confusing terminology significantly detracted from mutual support, situational awareness, or mission accomplishment.

3.4.5. Area 45--Ingress: (Includes routing into the threat area.)

3.4.5.1. Q. Aware of all known/simulated threats and defenses. Employed effective use of terrain masking and/or route and altitude selection.

3.4.5.2. Q-. Ignored some of the known/simulated threats and defenses. Improper use of terrain masking and/or route and altitude selection resulted in unnecessary exposure.

3.4.5.3. U. Failed to honor known/simulated threats and defenses significantly reducing survivability. Failed to employ effective terrain masking and/or route or altitude threat deconfliction.

3.4.6. Area 46--Low Altitude Navigation. (Includes all navigation activity from the Primary/Alternate entry control point to the route exit fix.)

3.4.6.1. Q. Maintained aircraft position within the published FLIP AP/1B route width. Planned en route control times were attained within one minute, SPINS, or briefed tolerances. Procedures and checklists required by the flight manual and other governing directives were accomplished with only minor omissions, deviations, or errors. Pilot flying was advised prior to exceeding +/- 150 feet.

3.4.6.2. Q-. Maintained aircraft within route corridor in accordance with FLIP AP/1B. Control times were attained within +/- 2 ½ minutes, SPINS, or briefed tolerances. Procedures and checklists required by the flight manual and other governing directives were accomplished with omis-

sions, deviations, or errors which indicated a definite need for additional training or study. Pilot flying was advised prior to exceeding +/- 250 feet.

3.4.6.3. U. Exceeded route width or timing as specified in governing directives/SPINS.

3.4.7. Area 47—Terrain Following:

3.4.7.1. Q. Procedures and checklists required to effectively employ the TF system were accomplished with only minor deviations or omissions. Malfunctions were correctly analyzed and, if able, corrected. Maintained selected set clearance +/-150 feet, except reasonable deviations in irregular terrain.

3.4.7.2. Q-. Procedures and checklists required to effectively employ the TF system were accomplished with omissions, deviations, or errors which indicated a definite need for study and/or additional training. Knowledge of TF system and associated malfunctions was the minimum acceptable. Minor omissions, errors or deletions did demonstrate a lack of ability/understanding that warrants supervision and/or additional training. Able to maintain aircraft within minus 200 feet to plus 250 feet of selected set clearance plane, except reasonable deviations in irregular terrain.

3.4.7.3. U. Allowed aircraft to depart the vertical or horizontal corridor boundaries. Allowed the aircraft to deviate greater than minus 200 feet, except for momentary crossings in irregular terrain.

3.4.8. Area 48--Weapons Employment:

3.4.8.1. Q. Procedures and checklists required to effectively prearm all weapons, or prepare all weapons for release, were accomplished with only minor deviations or omissions which did not preclude an effective release. Malfunctions were correctly analyzed and weapons were placed in the proper configuration for release. Weapon delivery must be accomplished within specified release parameters for the type of weapon being released or mission directives (if more restrictive). Release would have resulted in a hit IAW the reliability criteria of AFI 11-2B-2V1, *B-2--Aircrew Training*.

3.4.8.2. Q-. Procedures and checklists required to effectively prearm all weapons for release, were accomplished with omissions, deviations, or errors which indicated a definite need for study and/or additional training. Knowledge of weapon prearming or associated malfunctions was the minimum acceptable. Minor omissions, errors or deletions did not prevent a successful weapons release, but did demonstrate a lack of ability/understanding that warrants supervision and/or additional training. Release would have resulted in a hit IAW the reliability criteria of AFI 11-2B-2V1, *B-2--Aircrew Training*.

3.4.8.3. U. If any of the following occur:

3.4.8.3.1. Weapon was not released in the proper configuration.

3.4.8.3.2. Failure to recognize an obvious malfunction which adversely affected bombing capability.

3.4.8.3.3. Aborted, downgraded, or changed the bomb run without a valid reason.

3.4.8.3.4. Was unable to successfully accomplish an alternate type bomb run as a result of erroneous or incomplete in-flight planning.

3.4.8.3.5. Any error or combination of errors (equipment, procedures, techniques) which caused a release to result in a miss IAW the reliability criteria of AFI 11-2B-2V1, *B-2--Aircrew Training*.

3.4.8.3.6. Failure to meet weapons release parameters or to insure safe escape/safe separation.

3.4.8.3.7. Attempted to, or released weapons in contradiction with mission directives or SPINS.

3.4.9. Area 49--Range/ESS Procedures:

3.4.9.1. Q. Used proper procedures for entering and exiting the range/ESS. Range/ESS operations followed established procedures.

3.4.9.2. Q-. Minor deviations from established procedures for range/ESS entry, exit, or operations.

3.4.9.3. U. Major deviations from established procedures for range/ESS entry, exit, or operations.

3.4.10. Area 50--Egress: (Includes routing from the threat area.)

3.4.10.1. Q. Effectively used evasive maneuvers, terrain masking and/or altitude selection to complete an expeditious egress from the target area. Formation join-up was accomplished as soon as possible without undue exposure to enemy defenses.

3.4.10.2. Q-. Egress contributed to unnecessary exposure to threats and delayed formation join-up and departure from target area.

3.4.10.3. U. Egress caused excessive exposure to threats. Formation join-up was not accomplished or resulted in excessive exposure to threats.

3.4.11. Area 51--Training Rules/ROE:

3.4.11.1. Q. Adhered to and knowledgeable of all training rules/ROEs.

3.4.11.2. Q-. Minor deviations, omissions, and/or errors. Made timely and positive corrections. Did not jeopardize safety of flight.

3.4.11.3. U. Significant deviations indicating a lack of knowledge of training rules/ROEs.

3.4.12. Areas 52 though 60. Not used.

                                        CHARLES F. WALD, Lt General, USAF
                                        DCS/Air & Space Operations

ATTACHMENT 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 11-2, *Aircraft Rules and Procedures*

AFI 11-202V2, *Aircrew Standardization/Evaluation Program*

AFI 11-2B-2V1, *B-2--Aircrew Training*

AFMAN 11-210, *Instrument Refresher Course (IRC) Program*

AFI 11-215, *Flight Manuals Program (FMP)*

AFI 11-290, *Cockpit/Crew Resource Management Training Program*

AFPD 11-4, *Aviation Service*

AFI 33-360V1, *Publications Management Program*

AFTTP 3-1V23 (S-US ONLY), *(U) Tactical Employment--B-2*

Abbreviations and Acronyms

ACC—Air Combat Command

ACCR—Air Combat Command Regulation

AF—Air Force

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFSATCOM—Air Force Satellite Communications System

AFTO—Air Force technical order

AFTTP—Air Force Tactics, Techniques, and Procedures

AHC—Advanced Handling Characteristics

ANG—Air National Guard

AOA—Angle of Attack

ARCP—Air Refueling Control Point

ARTCC—Air Route Traffic Control Center

ATC—Air Traffic Control

ATD—Aircrew Training Device

CC—Commander

CFL—Critical Field Length

CRM—Cockpit/Crew Resource Management

DH—Decision Height

DRU—Direct Reporting Unit

EMCON—Emission Control

EPE—Emergency Procedures Evaluation

ESS—Electronic Scoring System

FAF—Final Approach Fix

FLIP—Flight Information Publication

FOA—Field Operating Agency

GATS—**GPS-Aided Targeting System**

GS—Glide Slope

HF—High Frequency

HQ—Headquarters

HSI—Horizontal Situation Indicator

IAS—Indicated Air Speed

IAW—In Accordance With

IFF—Identification, Friend or Foe

IFR—Instrument Flight Rules

ILS—Instrument Landing System

IRC—Instrument Refresher Course

KIAS—Knots Indicated Air Speed

MAJCOM—Major Command

MAP—Missed Approach Procedures

MC—Mission Commander

MCM—Multi-Command Manual

MDA—Minimum Descent Altitude

MRR—Minimum Runway Required

NAVAID—Navigational Aid

PAR—Precision Approach Radar

S—Secret

SEFE—Stan/Eval Flight Examiner

SILS—Simulated Instrument Landing System

SIMCERT—Simulator Certification

SIOP—Single Integrated Operational Plan

SPINS—Special Instructions

SQ—Squadron

TACAN—Tactical Air Navigation

TBD—To Be Determined

UHF—ultra high frequency

US—United States

USAF—United States Air Force

VDP—Visual Descent Point

VFR—Visual Flight Rules

VHF—Very High Frequency

WST—Weapon System Trainer

Terms

Deviation—Performing an action not in sequence with current procedures, directives, or regulations. Performing actions out of sequence due to unusual or extenuating circumstances will not be considered deviations. In some cases, momentary deviations may be acceptable; however, cumulative momentary deviations will be considered in the overall qualification level determination.

Error—Departure from approved procedures.

> **Major--**Detracted from mission accomplishment, adversely affected the use of equipment, or violated flight safety.

> **Minor--**Did not detract from mission accomplishment or from use of equipment, or violate flight safety.

Omission—To leave out a required action or annotation.