



DEPARTMENT OF THE NAVY

CHIEF OF NAVAL AIR TRAINING
CNATRA
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CORPUS CHRISTI TX 78419-5041

CNATRINST 5220.1E
N785

04 MAR 2004

CNATRA INSTRUCTION 5220.1E

Subj: QUALITY ASSURANCE AND REVALIDATION OF TRAINING DEVICES

Encl: (1) Quarterly Report of Flight Simulator Status
CNATRA 5220/1
(2) Sample Quarterly Report

(D)

1. Purpose. To publish information and guidelines pertinent to Naval Air Training Command (NATRACOM) Quality Assurance and Revalidation (QA&R) Program for training devices.

2. Cancellation. CNATRINST 5220.1D.

3. Summary of Revision. Significant changes have been made to this instruction and it should be reviewed in full. Notations are not included to indicate additions, deletions or revisions.

4. Discussion. The continuing introduction of highly complex and expensive flight simulators, cockpit procedures trainers (CPT) and aircraft systems training panels into the NATRACOM training device inventory mandates that system fidelity be maintained throughout equipment life. In addition, simulator, CPT, and system panel modernization and overhaul schedules must be determined to ensure consistent device accuracy. Perpetual oversight of material and operating conditions is a necessity. The burden of operational performance validation and equipment fidelity falls to the Training Air Wing (TRAWING) assigned as custodian of the device. The most cost effective method of validating simulator operating conditions is to use a team composed of military flight instructors assisted by contract simulator instructors and a Naval Air Warfare Center Training Systems Division (NAVAIRWARCEN TRASYS DIV ORLANDO) (NAVAIR ORLANDO) in-service engineer. The intent of this instruction is to allow maximum flexibility at each TRAWING to schedule operational and material validation within the guidelines of the Chief of Naval Air Training (CNATRA) requirements.

(R)

5. Policy. Each TRAWING within the NATRACOM shall be responsible for accomplishing required QA&R evaluations on the simulators, CPTs, Interactive Courseware/Computer Based Training (ICW/CBT) suites, and other training devices as appropriate.

04 March 2004

The intent of the program is to ensure a representative operational profile is "flown" on each device at scheduled intervals in order to evaluate as many of the simulators' current flight characteristics as possible as well as to ascertain up-to-date material conditions. Every effort shall be made to survey all regimes of simulator operation.

6. Responsibilities

(R a. CNATRA (N785)

(1) Provide overall NATRACOM policy direction for the NATRACOM QA&R program.

(D (2) Review NATRACOM QA&R reports.

b. TRAWING

(1) Appoint a representative (normally the Training Officer) to be responsible and accountable for flight simulators/training devices assigned to the TRAWING.

(R (2) The representative shall establish formal evaluation schedules and procedures in concert with associated activities. When completed, the representative will send a copy to CNATRA (N785) and the CNATRA Detachment (DET) Officer in Charge (OIC).

(3) Semi-annually (at least), schedule each motion and non-motion flight simulator for QA&R evaluation. Specific simulator scheduling shall be at the discretion of the cognizant TRAWING commander. A QA&R evaluation shall also be performed to document device conditions prior to and after modifications. QA&R evaluations shall be included in the monthly simulator instruction plan scheduled in accordance with the requirements contained in the simulator instructor contract.

(4) Ensure each simulator is "flown" using a military flight instructor in the cockpit and a contract instructor at the instructor's station to determine the material and technical condition of the simulator. During the flight, the team will:

(a) Compare the simulator to real aircraft performance.

(b) Compare the simulator to other simulators of the same model.

04 March 2004

(c) Determine the material condition of the trainer (i.e., bulbs burned out, switches broken, etcetera). Following the flight, the team will document a Visual Information Display System (VIDS)/Maintenance Action Form (MAF) (OPNAV 4790/60) for each discrepancy discovered. Routine maintenance discrepancies will be logged, tracked by the TRAWING Training Officer and passed to the Contractor Operation and Maintenance of Simulators (COMS) Contractor via the CNATRA DET OIC for correction. The device custodian will submit a Training Equipment Change Request (TECR) (NTSC 4720/2) to the NAVAIR ORLANDO in-service engineer for discrepancy review involving software modeling changes, hardware configurations and/or computer upgrades. Both types of discrepancies will form the basis for future simulator acquisitions, upgrades, and Service Life Assessment Program (SLAP)/Service Life Extension Program (SLEP) planning. (R)

(d) Document a standard Naval Flight Record Subsystem (NAVFLIRS) (OPNAV 3710/4 0107-LF-037-1020) for each QA&R evaluation. (R)

(5) Submit enclosure (1), Quarterly Report of Flight Simulator Status (CNATRA 5220/1), to CNATRA (N785) and CNATRA DET OIC via facsimile or electronic mail. Reports will be submitted in time to be received by the tenth working day following the start of each quarter. A sample Quarterly Report is provided by enclosure (2). (R)

(6) Maintain a log for each device documenting as a minimum: date, flight time, discrepancies and names of the evaluators for each QA&R evaluation. This log may be one specifically designed for this purpose or these entries may be consolidated with an already existing log. The quarterly report and the file log will form the basis for checking program compliance during CNATRA inspections.

7. Reports and Forms

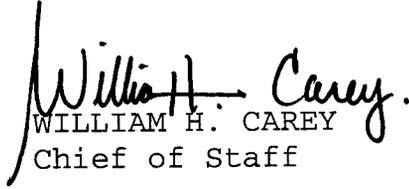
a. Report Control Symbol CNATRA 5220-1 has been assigned to the report in paragraph 6b(5), and is approved for 3 years from the date of this instruction. (R)

b. The Quarterly Report of Flight Simulator Status, CNATRA 5220/1, is available in electronic format on the CNATRA website at <https://www.cnatra.navy.mil/home.htm>. The OPNAV 4790/60,

CNATRAINST 5220.1E

04 MAR 2004

VIDS/MAF, and OPNAV 3710/4, NAVFLIRS are obtained through normal supply channels. The TECR, NTSC 4790/2 (Rev. 4/90), is obtained from NAVAIRWARCEN TRASYS DIV Supply Branch, Code 00X3.


WILLIAM H. CAREY
Chief of Staff

Distribution:

CNATRAINST 5215.1R

List I (A-E, AA)

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NAVAIRWARCEN TRASYS DIV ORLANDO FL

NAVAEROSPMEDINST

COMTRAWING TWO (COOP file)

Stocked by:

CNATRA

QUARTERLY REPORT OF FLIGHT SIMULATOR STATUS

FROM:

DATE:

TO: CNATRA (N785) (FAX: DSN 861-3928)

AIRCRAFT TYPE (One type per page)

COPY: OIC CNATRA DET

CONTINUATION SHEET

1 DEVICE NUMBER	2 SERIAL NUMBER	3 DATE QA&R SCHEDULED	4 NUMBER OF DESCREANCIES PRE-EXISTING	5 NUMBER OF DESCREANCIES THIS INSPECTION	6 NUMBER OF DESCREANCIES CORRECTED (COMBS)	7 NUMBER OF DESCREANCIES NOW 4+5-6	REASON 8+9+10=7			COMMENTS
							8 #AWM	9 #AWP	10 #TECR	

Enclosure (1)

04 MAR 2004
CNATRAINST 5220.1E

QUARTERLY REPORT OF FLIGHT SIMULATOR STATUS

1. List only one type aircraft per page.
2. AWM = Awaiting Maintenance
AP = Awaiting Parts
TECR = Training Equipment Change Request
3. If extra space is required for comments, continue on a separate blank sheet. Identify comment by simulator serial number.
4. If simulator has not been scheduled for QA & R during period of report, list "Not scheduled" in column 5 and complete the remaining columns as appropriate. Column 7 should reflect current status.

QUARTERLY REPORT OF FLIGHT SIMULATOR STATUS										
FROM: Commander, Training Air Wing Four								DATE: 5 April 04		
TO: CNATRA (N785) (FAX: DSN 861-3928)						AIRCRAFT TYPE (One type per page) T-34C				
COPY: OIC CNATRA DET						<input type="checkbox"/> CONTINUATION SHEET				
1 DEVICE NUMBER	2 SERIAL NUMBER	3 DATE QA&R SCHEDULED	4 NUMBER OF DESCREPA NCIES PRE-EXISTING	5 NUMBER OF DESCREPA NCIES THIS INSPECTION	6 NUMBER OF DESCREPA NCIES CORRECTED (COMBS)	7 NUMBER OF DESCREPA NCIES NOW 4+5-6	REASON 8+9+10=7			COMMENTS
							8 #AWM	9 #AWP	10 #TECR	
2B37	00012	8 JAN 04	2	3	3	2	1	1		
2B37	00017	11 FEB 04	1	0	1	0				

CNATRA 5220/1 (Rev. 1-04)

OVER

Enclosure (2)

CNATRAINST 5220.1E
04 March 2004

CNATRAINST 5220.1E

04 March 2004

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