ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
GREAT LAKES REGION

GL 1100. 57

3/7/91

SUBJ: ARTS PROGRAM CERTIFICATION

1. PURPOSE. This order defines the terms and steps used to certify a new version of an Automated Radar Terminal System (ARTS) operational program. It applies to all ARTS IIA and IIIA facilities in the Great Lakes Region.

2. DISTRIBUTION. This order is distributed to branch level in the regional office and to all field offices and facilities, limited level.

3. DEFINITIONS.

a. PROGRAM CHANGES. For purposes of this order, a program change is defined as any change in the instruction set (runstream) of the operational program. This does not include site data changes.

b. SITE DATA CHANGES. Site data changes are those that are made to the database section of the operational program (i.e., Minimum Safe Altitude Warning (MSAW) bin changes, fix pairs, etc.). These changes do not affect the runstream of the program and therefore do not change its certification status.

4. PROGRAM CERTIFICATION PROCESS. Software that is delivered to the site from the Federal Aviation Administration Technical Center (FAATC) has already been tested and certified by FAATC personnel. The following procedures define the responsibilities of the field facility Air Traffic (AT) and Airway Facilities (AF) personnel.

a. AT field automation specialists (AUS) or their designated representatives are expected to perform baseline and off-line testing of the delivered product and any adaptation changes prior to operational use.

b. Following the successful completion of all off-line testing, on-line controller testing shall be performed by AT in coordination with AF. The length and duration of this testing will depend on the complexity of the program change and the traffic environment at that facility. Normally, it will not exceed several 1 to 4 hour blocks over the course of a week or less. During times that the new program is being tested, it is not to be used for separation of aircraft (non-ARTS procedures must be used) and AF would report the status as code 66 for AT testing for National Airspace Performance Reporting System (NAPRS) purposes. The last certified version of the software is still considered the current operational program.

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FAA Form 1320-1 (6-80) (and previous editions)

c. At the conclusion of the on-line testing, the AUS would either revert to off-line testing if problems exist or declare the program ready to demonstrate initial operation capability (IOC) if there were no problems. At IOC the new program becomes the current operational program, is available for full-time operational use, and is utilized by AF for their certification process. During this shakedown period, the local air traffic manager shall determine what special restrictions, if any, will be applied to the new program (i.e., verify all handoffs, aircraft positions, etc.).

d. After successful completion of the IOC shakedown, the program will have met the requirements for an operational readiness demonstration (ORD) and will be officially commissioned as operational. The time-span from IOC to ORD should not normally exceed 30 days.

5. REVERTING TO PREVIOUS PROGRAM LEVEL. Any time after IOC is declared and the AUS determines that the program is not functioning properly, he/she shall revert to the last commissioned program level and remain there until the problems have been solved and the preceding test phases have been completed. The previously commissioned program level is considered to be certified and does not require AF intervention to be initiated. The AUS shall coordinate with AF to assure that they are aware of the software status.

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