

## APPENDIX D ELEMENTS OF AN AIRWORTHINESS RELEASE (AWR)

### D-1 INTRODUCTION

AR 70-62, *Airworthiness Qualification of US Army Aircraft Systems*, (Ref. 1), prohibits Army aviators from operating an air vehicle in the performance of official duties if there is no airworthiness release, interim statement of airworthiness qualification, statement of airworthiness qualification, or airworthiness approval. The US Army Aviation and Troop Command (ATCOM) is the approval authority for airworthiness of standard and nonstandard Army air vehicles for which it has engineering cognizance. As implied, the ATCOM does not have engineering cognizance for all Army air vehicles. Depending on how the air vehicle was acquired, the Federal Aviation Administration (FAA), National Aeronautics and Space Agency (NASA), US Air Force (USAF), and US Navy (USN) might still have engineering cognizance. Occasionally, the ATCOM Directorate of Engineering can accept responsibility for a modification to an air vehicle it did not qualify. However, the original qualification and design requirements must either be known or ATCOM must be able to establish sufficient engineering cognizance to validate the modification.

An airworthiness release (AWR) is the technical document that ATCOM issues to provide interim operating and maintenance information necessary for safe flight operation of an air vehicle system, subsystem, and allied equipment. Other agencies signify airworthiness approval by means other than an AWR, such as a type certificate or supplemental type certificate. An AWR (type certificate, etc.) is required prior to operation of a new air vehicle system or a fielded air vehicle system that has undergone a major modification as defined in AR 705-24, *Management of Test and Support Aircraft*, (Ref. 2). An AWR is also required prior to operation of an air vehicle with FAA, USAF, NASA, or USN airworthiness approval, if operator's manuals are unacceptable.

Format of the AMR should be in accordance with the established standard operating procedure (SOP) of the approving authority.

### D-2 CONTENTS

Contents should be as specified in the following paragraphs.

#### D-2.1 ADMINISTRATIVE INFORMATION

Prior to the main body of the AWR, the following administrative information should be provided.

##### D-2.1.1 REVISION AND DATE

Changes to AWRs should be made using a specification revision technique with the annotation in the right hand margin utilizing a revision number (R-1, R-2,...) of the portion of the release that has been updated. AWRs should contain a basic date and the date of all revisions on the first page of the release. Unless there is an SOP-related limitation on the number of revisions prior to the issuance of a new AWR, the AWR with the highest revision number should supersede all previously issued AWRs.

The use of distribution statements as provided for in Department of Defense Directive Number 5230.24, *Distribution Statements on Technical Documents*, (Ref. 3) should be considered for use on sensitive technical information.

### **D-2.1.2 ADDRESSEE**

The AWR will be addressed to the owner of the air vehicle and the agency incorporating the change or performing the test (if a standard Government test organization), and the project/product manager if one has cognizance of the change or test. Informational copies should also be sent as a minimum to the major command (MACOM) of the air vehicle, systems, or test activities. If the air vehicle is owned by an operational unit, the organization responsible for maintenance oversight (ATCOM Directorate for Maintenance, for example) should be provided an informational copy. If the air vehicle is undergoing formal materiel release processes, the organization responsible for technical testing (Army Material Systems Analysis Activity [AMSAA], for example) should be provided an informational copy. Both the cognizant procuring activity safety office and the service office responsible for safety oversight (Test and Evaluation Command [TECOM] safety office, for example) should also be provided copies of the AWR.

The user and the approving organization use the AWR to document the configuration authorized for flight and attendant changes to flight and maintenance procedures. If the AWR is not properly addressed and distributed, preliminary airworthiness evaluation (PAE), airworthiness and flight characteristic (A&FC) testing, operational test (OT), follow on evaluation (FOE), concept evaluations, and use of special mission modified air vehicle can be delayed at a significant cost. Crews, support personnel, facilities, and equipment idled by misdirected AWRs can quickly expend valuable program resources.

If technical testers and evaluators or cognizant safety personnel do not receive copies of the AWR in a timely manner, the materiel release and safety release for the air vehicle can be delayed, causing later delays in all program activities.

### **D-2.1.3 SUBJECT**

The subject of the AWR should clearly identify that this is an airworthiness release for a specific ground or flight test, evaluation, or operation of one model, design, and series Army air vehicle with identifying serial number(s). The subject should summarize the special mission or modification addressed in each particular AWR. Model, design, and series' prefixes and suffixes should be included. The general form is: "Airworthiness Release for (ground/flight) (test/evaluation/operation) of the (model identification XX-00Z) (air vehicle type) with (identify special mission/other major modification from the basic model identifier)". An example follows: "Airworthiness Release (AWR) for Test Flights of UH-60L Helicopter, S/N 89-XXXXX with the Portable Engine Analyzer Installed"

## **D-2.2 MAJOR ELEMENTS**

### **D-2.2.1 REFERENCES**

References cited in the main body of the release should be listed in the order in which they are referenced, or they may be included in an appendix. If an appendix is used, that appendix should be cited in this paragraph. Operations and maintenance manuals, contract numbers, Government and contractor specifications, test plans, previous FAA/MIL type certificate(s), and systems safety assessments should be cited, as appropriate. Changes to referenced documents should require changes in references with an accompanying revision of the AWR. When such changes affect air vehicle configuration, procedures, limitations, or restrictions, appropriate

changes to the other elements of the AWR should be accomplished. An example of references follows:

a. Technical Manual 55-1520-XYZ-10, 8 January 1988, through Change 15, 29 November 1991, *Operator's Manual, UH-1H Helicopters*.

b. Contractor's System Specification ##### (as necessary to define configuration).

\* The underlined portion of the paragraph number and title identifies the paragraph number and title in the AWR.

c. Technical Manual 55-1520-XYZ-23, 8 January 1988, through Change 5, 29 November 1991, *Aviation Unit Maintenance Manual. UH-1H Helicopters*.

d. *System Safety Assessment*, 9 February 1989,  
UH-1H Helicopter, US Army Aviation and Troop Command Safety Office.

e. Federal Aviation Administration Type Certification, *Bell Helicopter Model 206*, 3 February 1976.

### **D-2.2.2 PURPOSE**

The purpose of the AWR should be defined by reference to the subject air vehicle model(s), serial number(s), test types, dates and time intervals, and termination criteria. While this purpose may be brief for a modification of a previously qualified air vehicle, an air vehicle undergoing developmental testing may have more extensive testing requirements. A brief description should also be provided to define developmental qualification or required modification testing. An example is as follows: "This memorandum constitutes an Airworthiness Release (AWR) in accordance with AR 70-62, for the purpose of authorization to conduct maintenance test flights on UH-60L Helicopter, serial number 89-XXXXXX, with the Portable Engine Analyzer installed. Three tests shall be performed, using personnel trained and certified by the major command. This AWR is terminated upon test completion."

### **D-2.2.3 CONFIGURATION**

Configuration of the subject air vehicle should be defined in this element of the AWR by reference to contractor or Government specifications and drawing numbers, modification work orders (MWOs), technical bulletins (TBs), approved engineering change proposals (ECPs), etc. Software for automatic flight controls, engines, and weapon systems should be described or identified by release number.

These references should be included in paragraph 1 of the AWR (described in paragraph D-2.2.1) or may be included in an appendix to the AWR. The referenced documents should completely and clearly identify the configuration to be operated, tested, or evaluated, including serial numbers for the air vehicle and installed or modified equipment. Other serial numbers of unmodified components are included in the air vehicle historical records, and need not be cited here. An example is as follows:

"The basic UH-60 Rotorcraft is defined in the reference lx manual with exceptions noted in the respective DD Form 250 acceptance document. UH-60L rotorcraft serial number 89-12345 is modified by the temporary installation of the portable engine analyzer per reference lx and drawing number AABBC for conduct of maintenance test flights only. The Portable Engine Analyzer installed may be any one of serial numbers PEA-001, -003, or -004."

Changes to the configuration during subsequent revisions should be documented accordingly by each revision number.

#### **D-2.2.4 OPERATING INSTRUCTIONS, PROCEDURES, LIMITATIONS, AND RESTRICTIONS**

This element of the AWR and the subparagraphs under it should include, as a minimum, all operating instructions, procedures, restrictions, and limitations not included in referenced operator's manuals. Only limitations, restrictions, procedures, and instructions applicable to subject air vehicles are required, and special emphasis should be placed on characteristics of the subject air vehicle. The use of "NOTES," "CAUTIONS," and "WARNINGS," as defined in the Glossary, in the text of the AWR, should occur only when not cited in referenced documents or when necessary for added emphasis.

##### **D-2.2.4.1 OPERATING INSTRUCTIONS**

Maximum use should be made of existing operating manuals and pilot's checklists for standard Army air vehicles when such manuals have been approved. This element should identify additional, deleted, and amended operating instructions which modify the content of approved operator's manuals cited by reference. Addition, deletion, substitution, and/or supplementation of operator's manual procedures should identify applicable page and paragraph numbers. Example formats, showing both an additional instruction and substitution of instructions follow: "The subject air vehicle shall be operated using the following additional instruction, added as paragraph

8-20.1, 8-20.1 TEXT OF ADDITION" "Delete existing paragraph 8-25, page 8-12 of TM 55-1520XYZ-10; replace with paragraph below; and operate subject air vehicle in accordance with paragraph below:

8-25 TEXT OF SUBSTITUTION" "Replacement text inserted here."

##### **D-2.2.4.2 PROCEDURES**

This element should identify, by reference, the approved ground and flight operations of the air vehicle. Additional requirements for operating, preflight, and post flight procedures should also be discussed. The AWR should be prepared in compliance with the minimum equipment required for flight conditions specified in AR 95-1, *Flight Regulations*, (Ref. 4). An example paragraph follows: "The helicopter shall be operated in accordance with the reference "lx" Operator's Manual and this document. All flights performed with Portable Engine Analyzer equipment installed are to be conducted only with approved maintenance test pilots. If there is a conflict between the reference lx manual and this document, this document shall prevail. Maintenance test flights shall be performed in accordance with the reference "ly" Technical Manual."

##### **D-2.2.4.3 LIMITATIONS**

This element should include limitations which are different or missing from referenced operator's manual. Such limitations may include, but are not limited to, flight envelopes, operating limitations for fatigue critical components, and mission equipment operating limitations. An example follows: "Flight with the Portable Engine Analyzer installed shall be limited to the conditions for a maintenance test flight per reference lx and the following:

1. Maximum main rotor speed shall be 334 revolutions per minute (RPM).

2. Takeoff profiles and engine operating limits shall be maintained in accordance with Figures ly - lz of portable engine analyzer svstem specification (reference lx)."

#### **D-2.2.4.4 RESTRICTIONS**

Changes to flight envelope, weight and balance, flight and mission equipment operation, and environmental limitations should be cited. These restrictions may be more or less restrictive than those in the referenced operator's manuals. If necessary, these may be presented in graphical format, and included as an appendix to the AWR. An example follows:

1. Flight shall be accomplished only during day visual meteorological conditions (VMC).
2. Flight shall be accomplished only over areas suitable for emergency landing.
3. The portable engine analyzer is to be installed single engine only. Dual engine installation is prohibited."

#### **D-2.2.5 MAINTENANCE PROCEDURES, INSPECTIONS AND FREQUENCY OF INSPECTION**

The subparagraphs of this element should describe additional maintenance procedures, inspections, and inspection frequencies not cited in referenced maintenance manuals. In these subparagraphs reference to approved and applicable maintenance manuals and supplemental procedures is acceptable as a whole or in part, and should be used where applicable. The use of "NOTES," "CAUTIONS," and "WARNINGS," as defined in the Glossary, in the text of the AWR, should occur only when not cited in referenced documents or when necessary for added emphasis.

##### **D-2.2.5.1 MAINTENANCE PROCEDURES**

The objective of this element is to identify and explain the use of maintenance procedures, special tools, maintenance aids, or maintenance personnel not cited in referenced maintenance manuals. Detailed maintenance procedures should be referenced to applicable technical manuals whenever possible. Special or supplemental maintenance procedures, to include special tools, maintenance aids, or maintenance personnel should be defined. Reference to any applicable maintenance advisory and Safety of flight messages should be included. These types of maintenance procedures may include non-destructive inspection, calibration, pressure test, alignment, boresight, and maintenance test flight and maintenance operational check requirements before, during, and after flight. Special tools identified are those which are not part of the using unit's equipment, and may include test instruments, fixtures, alignment jigs, hand tools, and inspection equipment. The application of these procedures to modified air vehicle may be simple. However, prototype air vehicles may not have well established maintenance procedures, special tools, maintenance aids, or maintenance personnel requirements. This lack of established requirements may require reference to an attachment for complete definition. An example follows:

"The air vehicle should be inspected and maintained in accordance with all applicable maintenance manuals and associated maintenance advisory and safety of flight messages. Any discrepancies should be evaluated/repared prior to the next flight to ensure continued airworthiness of the air vehicle.

The cables for the portable engine analyzer should be routed and clamped in such a way that assures protection from physical abuse, i.e., being stepped on, door slammed on, or hung

from as a handhold. The cables should be adequately protected from vibration, chafing, or stretching. Cables should not be clamped to control tubes or cables, fuel lines, hydraulic lines, etc." Calibration of the portable engine analyzer shall only be performed by manufacturer's representatives authorized in writing by the ATCOM Directorate for Engineering."

#### **D-2.2.5.2 INSPECTIONS**

This element should include additional or modified inspection requirements needed during preflight, post flight, and periodic or phase maintenance on air vehicle systems or mission equipment packages (MEP), that are not contained in referenced maintenance manuals. These inspections may be necessitated by additional or modified equipment for modification programs, and may be based on experience gained during prototype air vehicle flight and maintenance operations. Special or supplemental inspection procedures, to include special test equipment, should also be defined. The application of these additional or modified inspections to modified air vehicle may be simple. However, a prototype air vehicle may not have well established maintenance inspection frequencies. This lack of established requirements may require reference to an attachment for complete definition.

All nonstandard installations which attach to primary structure, attach to dynamic components, or which have the potential of initiating a crack will require supplemental inspections. Installations which could disable essential avionics and electrical systems; initiate fire; damage fuel, pneumatic, and hydraulic lines; jam or damage controls; damage hub and rotor blades; or strike an occupant, or cause an occupant to fall from the air vehicle will be inspected for progressive wear and damage.

If avionics or electrical system changes are involved, a qualitative electromagnetic compatibility (EMC) test should be conducted prior to first flight to demonstrate that the newly installed equipment is not a source of, or victim of, electromagnetic interference (EMI). This should be accomplished by monitoring the performance of all new and existing subsystems as the individual subsystems are operated in turn. The operation of this equipment must include a power on/power-off cycle, initializing or warm-up (if applicable), and all modes of operation. All equipment should be in the "inflight" configuration and should be operated using air vehicle generated power. The flight test portion of the EMC test should be conducted under day visual meteorological conditions (VMC).

An example of the inspection element follows: "A pre-flight visual inspection shall be made of the portable engine analyzer to ensure that no progressive structural deterioration is occurring, that there is no loss of security and that no damage to the host air vehicle exists."

#### **D-2.2.5.3 FREQUENCY OF INSPECTION**

The objective of this element is to define inspection frequencies which have changed from referenced maintenance manual frequencies. Only frequencies which have changed from referenced maintenance manual frequencies should be included in this element. The application of these additional or modified inspection frequencies to air vehicles be simple. However, a prototype air vehicle may not have well established maintenance inspection frequencies. This lack of established frequencies may require reference to an attachment for complete definition. Three types of frequency of inspection changes may be required. Scheduled maintenance

inspections which have frequencies changed from maintenance manual frequencies should be cited. Additionally, new scheduled inspection requirements may be generated due to equipment additions in a modification program or based on experience gained during prototype air vehicle flight and maintenance operations. Finally, excessive repetition of scheduled inspections may induce maintenance related failures, and inspection frequencies may be reduced in order to evaluate the effect on safety.

Inspection frequency changes should identify the scheduled inspection and revised frequency (expressed in days, flight hours, cycles, rounds, etc.). Special inspections may be required when:

1. Checks are required to verify structural integrity
2. Test flights are required
3. The condition of the new or modified equipment, attachments, cables, and connections are unknown (basic aircraft inspection is part of routine inspection)
4. The new or modified equipment could possibly lead to a dangerous condition
5. Maintenance actions are necessary
6. Limitations exist in the AWR after the electromagnetic compatibility (EMC) checks are complete
7. Air vehicle operating instructions, limitations, or restrictions have changed.

Omission of a special inspection could lead to safety of flight or maintenance concerns, loss of the air vehicle for further test or operation, or more extensive inspection requirements at a later date. If this omission has any of these consequences, the impact of such an omission should be specified in the AWR.

#### D-2.2.5.4 PARTS AVAILABILITY

The objectives of this paragraph are to specify availability and to define conditions when parts may need to be locally procured or manufactured to allow operation of the affected air vehicle. If possible, approved sources for available parts or materials should be provided for ease of procurement, along with interface requirements. Conditions may involve circumstances where acceptable commercial off-the-shelf components are available, can be procured other than on a "sole-source" basis, or have shorter lead time (procurement, manufacturing, and delivery time) than parts in the military supply system.

This element should define procedures for manufacturing or obtaining non-standard air vehicle parts as well as parts used in air vehicle modifications. Reference will be made to equipment specifications and drawing numbers, wherever possible. An example may be as follows: "Parts needed for this modification may not be available in the supply system. Your activity or facility must locally procure/manufacture the modification parts (plus any additional spare parts). This AWR is not authorization to procure any material or sources 'Sole Source'."

#### D-2.2.5.5 WEIGHING

This element should contain procedures for compliance with air vehicle weight and balance as contained in AR 95-3, *General Provisions, Training, Standardization and Resource Management* (Ref. 5). The proper forms to be included in the logbook of the subject air vehicle should be identified. The forms defined by MIL-STD-1374, *Weight and Balance Data Reporting Forms for Aircraft (Including Rotorcraft)*, (Ref. 6) should be used to document modifications to production air vehicles and weight and balance conditions for prototype air vehicles. As a minimum, the DD Form 365F defined by Ref. 8 should be included in the air vehicle logbook. Other forms, such as the DD Form 365A and DD Form 365C, should be included in the air vehicle historical records, and the cognizant engineering activity should require copies of all cited forms. Special instructions should be noted in that the subject air vehicle will not be loaded outside the center of gravity (cg) limits. If any deviation from the approved limits exist and are acceptable for test conditions, reference shall be made in the paragraph of this AWR where operational restrictions are specified (par. 4.4). Examples of the AWR citation follow:

The DD Form 365F for UH-60L rotorcraft serial number 88-12345 is included at attachment A to this AWR.

The DD Forms 365A and 365C for UH-60L rotorcraft serial numbers 89-12345, 89-67890, 90-23456, and 91-34567 are included at attachment A to this AWR. These forms should be used to update individual rotorcraft DD Forms 365F prior to flight under the conditions of this AWR. This AWR is not authorization to operate these rotorcraft outside established weight or center of gravity envelopes.

#### D-2.2.5.6 DESIGNATION PREFIX ASSIGNMENT

This element will contain the instructions for required assignment of a special prefix to the air vehicle designator. The procedures, criteria, and conditions for assignment of these prefixes are contained in AR 70-50, *Designating and Naming Defense Equipment Military Aerospace Vehicles*, (Ref. 7). The special prefixes are defined as follows:

"J" - Special Test, Temporary - Air vehicles on special test programs by authorized organizations, or on bailment contract (as defined by AR 95-20, Volume 1, *Contractor Flight and Ground Operations* and Volume 2, *Government Flight Representative Guidance*, (Ref. 8), whose installed property has been temporarily removed for the test.

"N" - Special Test, Permanent - Aerospace vehicles on special test programs by authorized activities or on bailment contract, whose configurations are so drastically changed that to return them to their original condition is not practical or economical. "Y" - Prototype - A few aerospace vehicles procured, usually before production decision, to serve as models or patterns.

#### D-2.2.6 AIRCRAFT LOGBOOK ENTRIES

Each AWR should contain only the applicable logbook entries required by the preparer. Logbook entries should be in accordance with DA PAM 738-751, *Functional Users Manual for the Army Maintenance Management System - Aviation (TAMMS-A)*, (Ref. 9)

The explanation and proper use of the various DA 2408 series forms is included in (Ref. 6). Entries should be made on Department of Army (DA) Form 2408-13-1/2408-13-1-E. The appropriate status symbol should be specified in the AWR, with a reference of the AWR release date entered in the Fault Information Block. A red dash should be used in the status block for procedures that are required prior to the next flight, i.e., EMC tests, special inspections, and/or functional checks. For readiness reporting purposes, AWRs which require perpetual circle red "X" write-ups (semi-permanent restrictions) shall not cause the air vehicle to be reported as partially mission capable (PMC). For those purposes, air vehicles which are nonstandard configured and operating under the AWR may be reported as fully mission capable (FMC).

The air vehicle DA Form 2408-15/2408-15-E should be annotated to reflect the successful completion of the EMC test and/or special inspections and to cite the AWR by subject and date. The DA Form 2408-15/-15-E need to be annotated to reflect temporary installations, as well as, permanent changes to configuration.

An exact copy of the AWR describing the operating procedure, limitations, and restrictions should be inserted in the air vehicle logbook and another copy inserted in the Air Vehicle Historical Record File.

#### D-2.2.7 TERMINATION OF RELEASE

A termination date or clearly defined conditions for cancellation of the AWR should be identified. This termination date or event is defined as the date or completion of event after which this AWR or revision is no longer valid. For example, the termination provisions may read: "Three tests will be performed, using personnel trained and certified by the major command. This AWR is terminated with test completion. This air vehicle should be returned to standard configuration prior to transfer or turn-in to an overhaul facility."

#### D-2.2.8 SIGNATURE OF ISSUE AUTHORITY

The AWR should be approved and signed in accordance with AR 70-62 (Ref. 1) and the policies of the approving authority's SOP.

All technical content should be coordinated and validated by the appropriate offices within the policies of the approving authority's SOP. All classified information should be coordinated with the approving authority's Security Office prior to submittal for approval. All AWRs should also be coordinated with the approving authority's safety office prior to submittal for approval. Any identified hazard or risk should have been eliminated or reduced to an acceptable level. Acceptable risk may be shown by compliance with applicable standards or specifications that support an engineering judgment or formal resolution through the hazard risk management process in accordance with AR

385-16, *System Safety Engineering and Management*, (Ref. 10), or in accordance with the managing activities system safety management plan.

#### D-2.2.9 APPENDICES

Appendices may be used to show configuration data, list references, provide operating and maintenance limitations, figures, other graphical data, and information which is too voluminous for inclusion in the main body of the AWR. Additionally, when a limited amount of classified information is to be a part of the AWR, a classified appendix may be used to allow the main body of the AWR to remain unclassified. All appendices used should be referenced in the appropriate paragraph of the AWR, and should be packaged in the order in which they are referred to in the AWR.

APPENDIX D  
LIST OF ACRONYMS AND ABBREVIATIONS

A&FC	=	airworthiness and flight characteristic
AMSAA	=	army material systems analysis activity
AWR	=	airworthiness release
cg	=	center of gravity
ECP	=	engineering change proposal
EMC	=	electromagnetic compatibility
EMI	=	electromagnetic interference
FAA	=	federal aviation administration
FMC	=	fully mission capable
FOE	=	follow on evaluation
MACOM	=	major command
MEP	=	mission equipment package
MWO	=	modification work orders
NASA	=	national aeronautics and space administration
PAE	=	preliminary airworthiness evaluation
PMC	=	partially mission capable
RPM	=	revolutions per minute
SAQ	=	statement of airworthiness qualification
SOP	=	standing operating procedure
TB	=	technical bulletins
TECOM	=	test and evaluation command
USAF	=	us air force
USN	=	us navy
UT	=	user test
VMC	=	visual meteorological conditions

## APPENDIX D REFERENCES

1. AR 70-62, *Airworthiness Qualification of US Army Aircraft Systems*, 15 July 1978. 1988.
2. AR 705-24, *Management of Test and Test Support Aircraft*, 15 May
3. DoDD 5230.24, *Distribution Statement of Technical Documents*, 18 March 1987.
4. AR 95-1, *Flight Regulations*, 30 May 1990.
5. AR 95-3, *General Provisions. Training, Standardization, and Resource Management*, 27 September 1990.
6. MIL-STD-1374, *Weight and Balance Data Reporting Forms for Aircraft (Including Rotorcraft)*, 13 September 1977.
7. AR 70-50, *Designating and Naming Defense Equipment Military Aerospace Vehicles*, 18 May 1990
8. AR 95-20, Volume 1, *Contractor Flight and Ground Operations*, and Volume 2, *Government Flight Representative Guidance*, November 1991.
9. DA PAM 738-751, *Functional Users Manual for the Army Maintenance Management System - Aviation (TAMMS-A)*, 15 June 1992.
10. AR 385-16, *System Safety Engineering and Management*, 3 September 1985.