PENTASTAR
Aviation Charter, Inc.™

September 1, 2017

Martha Winnard
Federal Aviation Administration
East Michigan Flight Standards District Office
Willow Run Airport – East Side
8800 Beck Rd.
Belleville, Mi. 48111

Subject: Revision 8 to PACI Joint Flight Maintenance Procedure Bulletin (FMPB 135.00.02)

Dear Ms. Winnard,

Pentastar Aviation Charter, Inc. requests your review and acceptance of the attached revision (Rev 8) to the Pentastar Aviation Charter, Inc. Joint Flight Maintenance Procedure Bulletin, FMPB 135.00.02. Changes were made to the form removing references to PACI and the addition of a block at the top of the form title, "Operator Name." Instructions on the use of the form associated with the new block have been added.

The "XX/XX/XXXX" after "Revision 8" at the top of page one will be replaced with the date of acceptance and the acceptance date will be placed on the lower right corner of each page of the document upon distribution.

The aircraft flight log as contained in Revision 7 of this bulletin will continue to be used until supplies are exhausted.

For your convenience, there is a provision on this letter to signify FAA-acceptance of this revision. Please feel free to contact me if you require additional information.

Thank you in advance for your response to this request.

Sincerely,

Gary M. Roberts
Director of Quality Assurance
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For FAA Use

Joint Flight / Maintenance Procedure Bulletin FMPB 135.00.02 at Revision 8, is FAA accepted by the East Michigan FSDO GL23.
FAA Signature: Martha Winnard Acceptance Date: 8/31/17

PROCEDURE BULLETIN

BULLETIN TYPE:	Joint Flight / Maintenance Procedure Bulletin
BULLETIN NUMBER:	**FMPB 135.00.02**
BULLETIN TITLE:	Aircraft Flight Log (AFL), Form AAC2000
EFFECTIVE DATE:	Revision 8 – 08/31/2017

This Bulletin is FAA accepted

1. **PURPOSE**

This Bulletin provides guidance and procedures for the initiation and handling of the Pentastar Aviation Charter, Inc. UG8A235J 14 CFR 135 Aircraft Flight Log (AFL), Form AAC 2000.

2. **SCOPE**

This AFL is required to be utilized under all FAR operations, including provisions of 14 CFR Part 91, while the applicable aircraft is listed on Pentastar Aviation Charter, Inc. UG8A235J 14 CFR Part 135 Operations Specifications, Part D, ¶ D085. All data entries are to be consistent regardless of the type of operation conducted in order to maintain continuity with 14 CFR Part 135 and Part 91 requirements.

3. **OPTION**

Although it was created to satisfy the requirements of 14 CFR Part 135, this AFL may be used for aircraft operated entirely under 14 CFR Part 91.

4. **GENERAL**

This FMPB is divided into topical sections for ease of understanding. The sections are arranged as follows:

- **Section 1 – General**. This Section contains illustrations of the three elements of the AFL.
- **Section 2 – AFL Cover**. This Section provides instructions for the initiation of the AFL cover.
- **Section 3 – New AFL Page Set**. This Section provides instructions for the initiation of a new AFL page set.
- **Section 4 – Operations Entries**. This Section provides instructions for the entries to be made by flightcrew members.
- **Section 5 – Flexible Entries**. This Section provides instructions for additional (flexible) entries that may be made by flightcrew members or maintenance personnel.
- **Section 6 – Maintenance Entries**. This Section provides procedures for entries to be made by maintenance personnel.
- **Section 7 – AFL Procedural Notes**. This Section provides handling procedural notes pertaining to the various AFL entries.

SECTION 1 - GENERAL

1. INTRODUCTION

The Aircraft Flight Log contains three elements: 1) the AFL cover, 2) the NCR protective flap and, 3) the Aircraft Flight Log form. The three elements of the AFL are assembled in book format with 50 page sets of Aircraft Flight Log forms in each book. Aircraft Flight Log page sets are sequentially serial numbered for traceability and coherence to other flight operations and maintenance documents and reports.

The Aircraft Flight Log form is made up of groups of three matched sheets of Aircraft Flight Log forms. The sheets are carbonless "NCR" paper and allow transference of entries from the top copy to the second and third copies.

The NCR protective flap in the AFL must be placed between the Aircraft Flight Log page sets when making entries.

(1) The top (white) sheet is the medium for flightcrew members to record trip data, mechanical irregularities, and other flight related data. Entries on this sheet are transferred to the second and third copies of the form.

(2) The second (yellow) sheet is the medium for maintenance personnel to record corrective actions for any mechanical irregularity entry made, airworthiness release entry, etc. Entries on the second sheet are transferred to the third copy of the form.

(3) The third (pink) sheet is the medium for capturing both flightcrew member and maintenance personnel entries. It serves as a record of all transactions on the applicable Aircraft Flight Log page sets.

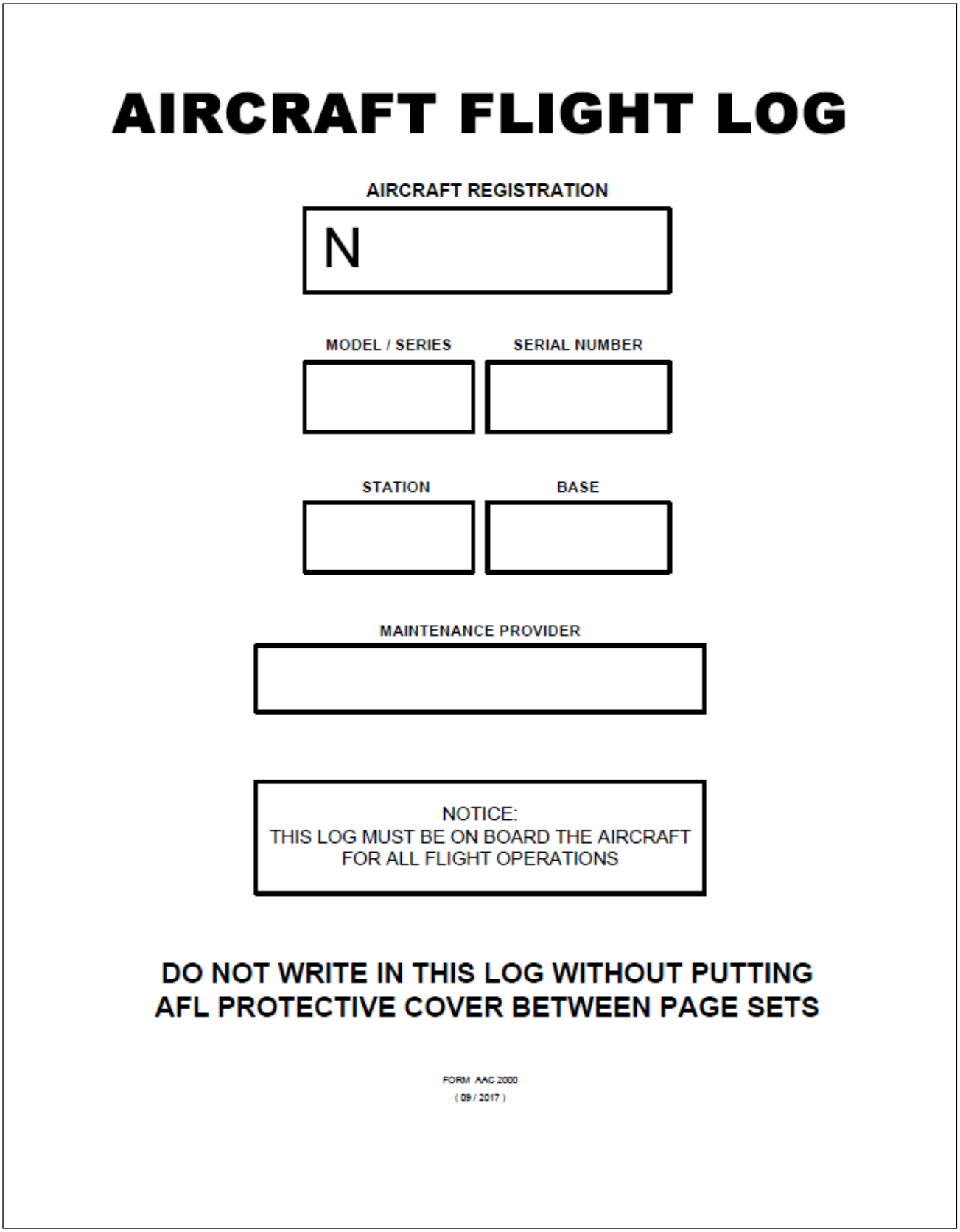
2. CONTENTS

This Section contains illustrations of the three elements of the Aircraft Flight Log (AFL).

- **Figure 1-1, Aircraft Flight Log Cover**, illustrates the cover of the AFL book. The AFL cover provides aircraft identity information, its base location, and its maintenance provider identification. The AFL cover entries are described in Section 2, herein.

- **Figure 1-2, NCR Protective Flap**, illustrates the AFL NCR protective flap and its contents. The NCR protective flap serves as a device to prevent unwanted transference of entries from one page set to another, it also serves as a reference, containing codes and other information to be used by flightcrew members and others when making entries in the Aircraft Flight Log pages.

- **Figure 1-3, Aircraft Flight Log Form**, illustrates the Aircraft Flight Log form. The Aircraft Flight Log entry requirements are described in Sections 4 and 5, herein.



AIRCRAFT FLIGHT LOG

AIRCRAFT REGISTRATION

N

MODEL / SERIES

SERIAL NUMBER

STATION

BASE

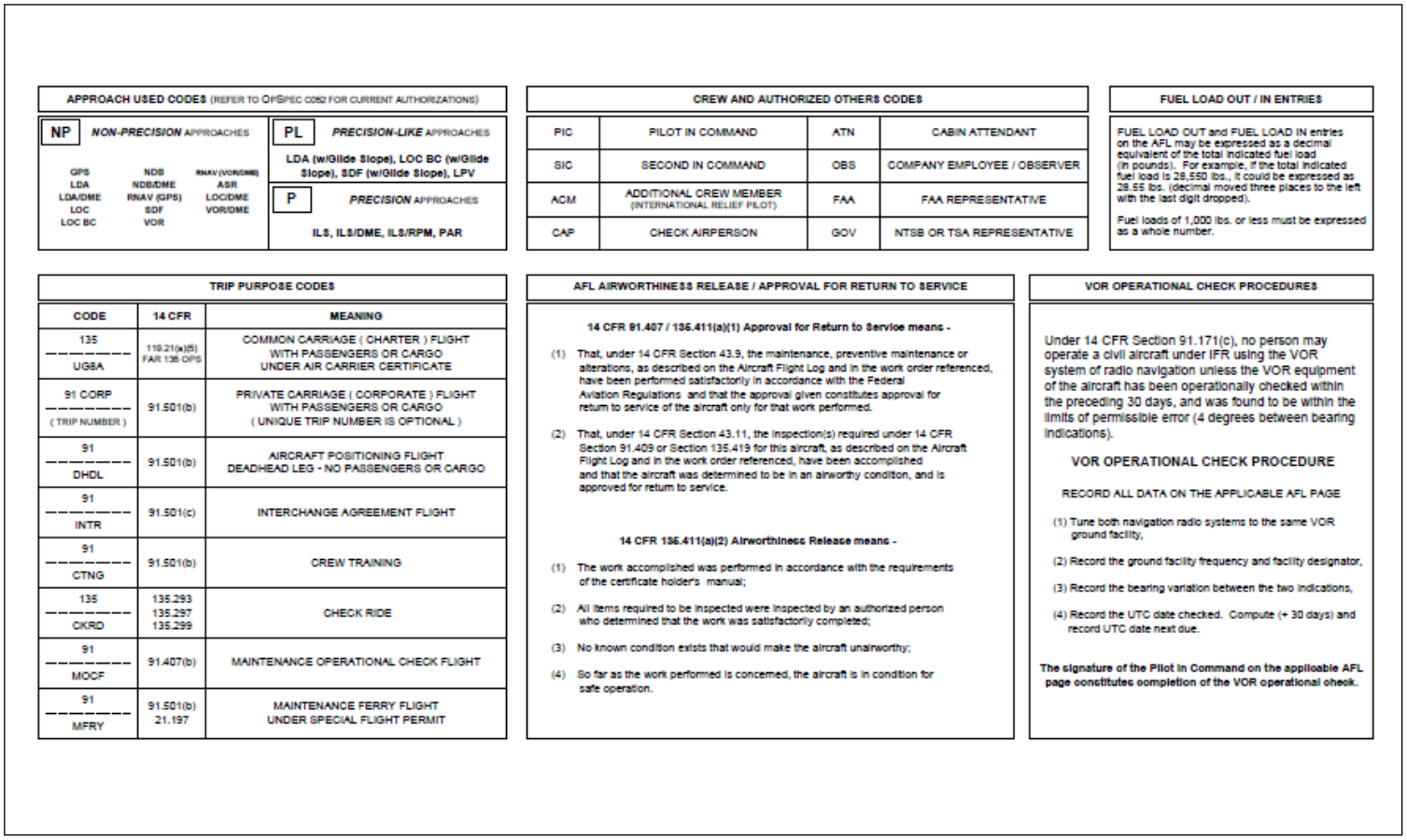
MAINTENANCE PROVIDER

NOTICE:
THIS LOG MUST BE ON BOARD THE AIRCRAFT
FOR ALL FLIGHT OPERATIONS

DO NOT WRITE IN THIS LOG WITHOUT PUTTING AFL PROTECTIVE COVER BETWEEN PAGE SETS

FORM AAC 2000
(09 / 2017)

Figure 1-1, Aircraft Flight Log Cover



APPROACH USED CODES (REFER TO OPSPEC C052 FOR CURRENT AUTHORIZATIONS)

NP *NON-PRECISION* APPROACHES		**PL** *PRECISION-LIKE* APPROACHES
GPS	NDB	RNAV (VOR/DME)	LDA (w/Glide Slope), LOC BC (w/Glide Slope), SDF (w/Glide Slope), LPV
LDA	NDB/DME	ASR	
LDA/DME	RNAV (GPS)	LOC/DME	**P** *PRECISION* APPROACHES
LOC	SDF	VOR/DME	ILS, ILS/DME, ILS/RPM, PAR
LOC BC	VOR		

CREW AND AUTHORIZED OTHERS CODES

PIC	PILOT IN COMMAND	ATN	CABIN ATTENDANT
SIC	SECOND IN COMMAND	OBS	COMPANY EMPLOYEE / OBSERVER
ACM	ADDITIONAL CREW MEMBER (INTERNATIONAL RELIEF PILOT)	FAA	FAA REPRESENTATIVE
CAP	CHECK AIRPERSON	GOV	NTSB OR TSA REPRESENTATIVE

FUEL LOAD OUT / IN ENTRIES

FUEL LOAD OUT and FUEL LOAD IN entries on the AFL may be expressed as a decimal equivalent of the total indicated fuel load (in pounds). For example, if the total indicated fuel load is 28,550 lbs., it could be expressed as 28.55 lbs. (decimal moved three places to the left with the last digit dropped).

Fuel loads of 1,000 lbs. or less must be expressed as a whole number.

TRIP PURPOSE CODES

CODE	14 CFR	MEANING
135 ——— UGBA	119.21(a)(5) FAR 135 OPS	COMMON CARRIAGE (CHARTER) FLIGHT WITH PASSENGERS OR CARGO UNDER AIR CARRIER CERTIFICATE
91 CORP ——— (TRIP NUMBER)	91.501(b)	PRIVATE CARRIAGE (CORPORATE) FLIGHT WITH PASSENGERS OR CARGO (UNIQUE TRIP NUMBER IS OPTIONAL)
91 ——— DHDL	91.501(b)	AIRCRAFT POSITIONING FLIGHT DEADHEAD LEG - NO PASSENGERS OR CARGO
91 ——— INTR	91.501(c)	INTERCHANGE AGREEMENT FLIGHT
91 ——— CTNG	91.501(b)	CREW TRAINING
135 ——— CKRD	135.293 135.297 135.299	CHECK RIDE
91 ——— MOCF	91.407(b)	MAINTENANCE OPERATIONAL CHECK FLIGHT
91 ——— MFRY	91.501(b) 21.197	MAINTENANCE FERRY FLIGHT UNDER SPECIAL FLIGHT PERMIT

AFL AIRWORTHINESS RELEASE / APPROVAL FOR RETURN TO SERVICE

14 CFR 91.407 / 135.411(a)(1) Approval for Return to Service means -

(1) That, under 14 CFR Section 43.9, the maintenance, preventive maintenance or alterations, as described on the Aircraft Flight Log and in the work order referenced, have been performed satisfactorily in accordance with the Federal Aviation Regulations and that the approval given constitutes approval for return to service of the aircraft only for that work performed.

(2) That, under 14 CFR Section 43.11, the inspection(s) required under 14 CFR Section 91.409 or Section 135.419 for this aircraft, as described on the Aircraft Flight Log and in the work order referenced, have been accomplished and that the aircraft was determined to be in an airworthy condition, and is approved for return to service.

14 CFR 135.411(a)(2) Airworthiness Release means -

(1) The work accomplished was performed in accordance with the requirements of the certificate holder's manual;

(2) All items required to be inspected were inspected by an authorized person who determined that the work was satisfactorily completed;

(3) No known condition exists that would make the aircraft unairworthy;

(4) So far as the work performed is concerned, the aircraft is in condition for safe operation.

VOR OPERATIONAL CHECK PROCEDURES

Under 14 CFR Section 91.171(c), no person may operate a civil aircraft under IFR using the VOR system of radio navigation unless the VOR equipment of the aircraft has been operationally checked within the preceding 30 days, and was found to be within the limits of permissible error (4 degrees between bearing indications).

VOR OPERATIONAL CHECK PROCEDURE

RECORD ALL DATA ON THE APPLICABLE AFL PAGE

(1) Tune both navigation radio systems to the same VOR ground facility,

(2) Record the ground facility frequency and facility designator,

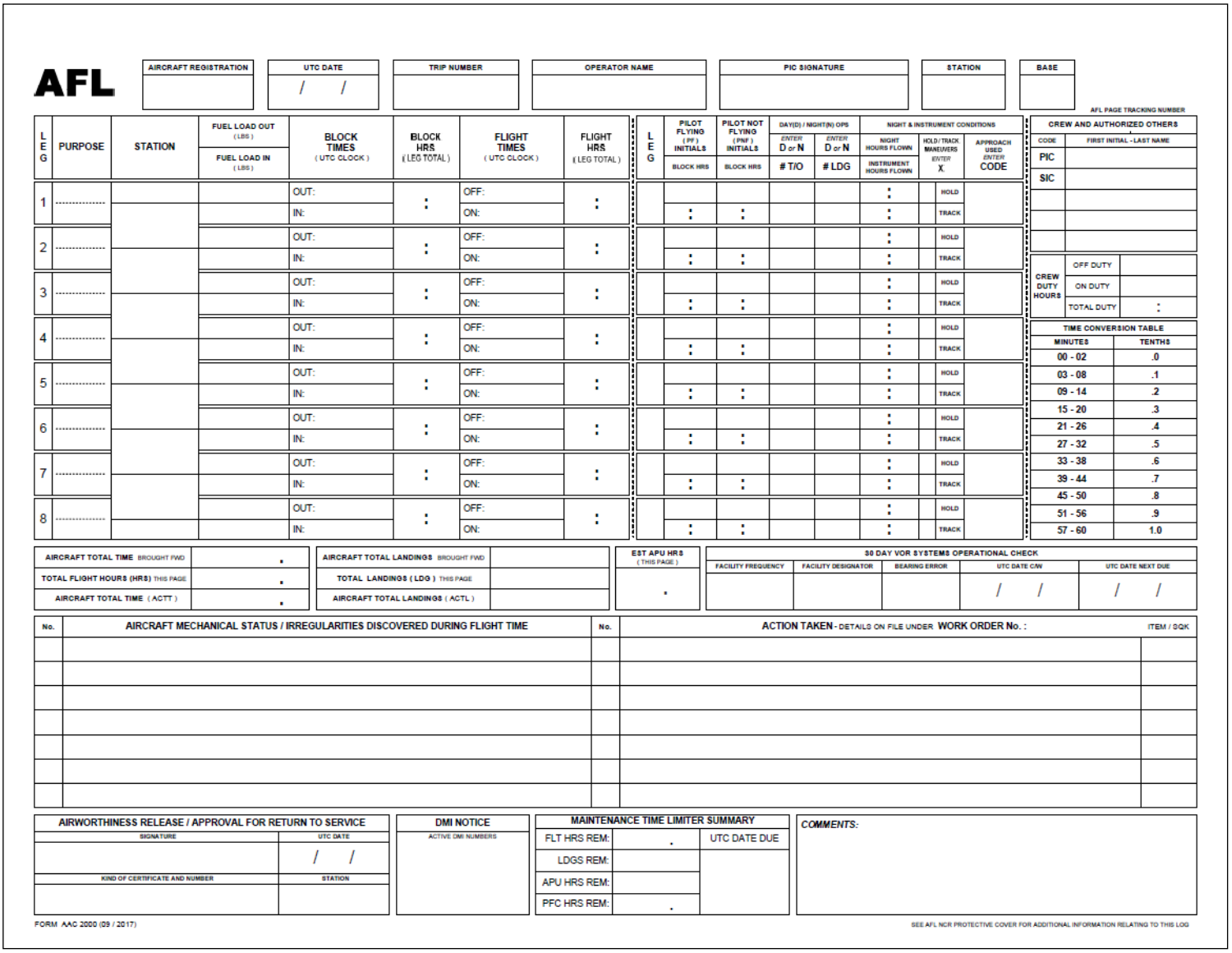
(3) Record the bearing variation between the two indications,

(4) Record the UTC date checked. Compute (+ 30 days) and record UTC date next due.

The signature of the Pilot in Command on the applicable AFL page constitutes completion of the VOR operational check.

Figure 1-2, NCR Protective Flap

SECTION 1 – GENERAL



AFL

AIRCRAFT REGISTRATION	UTC DATE	TRIP NUMBER	OPERATOR NAME	PIC SIGNATURE	STATION	BASE
	/ /					

AFL PAGE TRACKING NUMBER

LEG	PURPOSE	STATION	FUEL LOAD OUT (LBS) / FUEL LOAD IN (LBS)	BLOCK TIMES (UTC CLOCK)	BLOCK HRS (LEG TOTAL)	FLIGHT TIMES (UTC CLOCK)	FLIGHT HRS (LEG TOTAL)	LEG	PILOT FLYING (PF) INITIALS / BLOCK HRS	PILOT NOT FLYING (PNF) INITIALS / BLOCK HRS	DAY(D) / NIGHT(N) OPS ENTER D or N # T/O	DAY(D) / NIGHT(N) OPS ENTER D or N # LDG	NIGHT & INSTRUMENT CONDITIONS NIGHT HOURS FLOWN / INSTRUMENT HOURS FLOWN	HOLD / TRACK MANEUVERS ENTER X	APPROACH USED ENTER CODE
1				OUT: / IN:	:	OFF: / ON:	:		/ :	:			: / :	HOLD / TRACK	
2				OUT: / IN:	:	OFF: / ON:	:		/ :	:			: / :	HOLD / TRACK	
3				OUT: / IN:	:	OFF: / ON:	:		/ :	:			: / :	HOLD / TRACK	
4				OUT: / IN:	:	OFF: / ON:	:		/ :	:			: / :	HOLD / TRACK	
5				OUT: / IN:	:	OFF: / ON:	:		/ :	:			: / :	HOLD / TRACK	
6				OUT: / IN:	:	OFF: / ON:	:		/ :	:			: / :	HOLD / TRACK	
7				OUT: / IN:	:	OFF: / ON:	:		/ :	:			: / :	HOLD / TRACK	
8				OUT: / IN:	:	OFF: / ON:	:		/ :	:			: / :	HOLD / TRACK	

CREW AND AUTHORIZED OTHERS	
CODE	FIRST INITIAL - LAST NAME
PIC	
SIC	

CREW DUTY HOURS	
OFF DUTY	
ON DUTY	
TOTAL DUTY	:

TIME CONVERSION TABLE	
MINUTES	TENTHS
00 - 02	.0
03 - 08	.1
09 - 14	.2
15 - 20	.3
21 - 26	.4
27 - 32	.5
33 - 38	.6
39 - 44	.7
45 - 50	.8
51 - 56	.9
57 - 60	1.0

AIRCRAFT TOTAL TIME BROUGHT FWD	.
TOTAL FLIGHT HOURS (HRS) THIS PAGE	.
AIRCRAFT TOTAL TIME (ACTT)	.

AIRCRAFT TOTAL LANDINGS BROUGHT FWD	
TOTAL LANDINGS (LDG) THIS PAGE	
AIRCRAFT TOTAL LANDINGS (ACTL)	

EST APU HRS (THIS PAGE)
.

30 DAY VOR SYSTEMS OPERATIONAL CHECK				
FACILITY FREQUENCY	FACILITY DESIGNATOR	BEARING ERROR	UTC DATE C/W	UTC DATE NEXT DUE
			/ /	/ /

No.	AIRCRAFT MECHANICAL STATUS / IRREGULARITIES DISCOVERED DURING FLIGHT TIME	No.	ACTION TAKEN - DETAILS ON FILE UNDER WORK ORDER No. :	ITEM / SQK

AIRWORTHINESS RELEASE / APPROVAL FOR RETURN TO SERVICE	
SIGNATURE	UTC DATE
	/ /
KIND OF CERTIFICATE AND NUMBER	STATION

DMI NOTICE
ACTIVE DMI NUMBERS

MAINTENANCE TIME LIMITER SUMMARY		
FLT HRS REM:	.	UTC DATE DUE
LDGS REM:		
APU HRS REM:		
PFC HRS REM:	.	

COMMENTS:

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SEE AFL NCR PROTECTIVE COVER FOR ADDITIONAL INFORMATION RELATING TO THIS LOG

Figure 1-3, Aircraft Flight Log Form

SECTION 2 - AFL COVER

1. INTRODUCTION

The AFL Cover is to be initiated each time a new AFL book is put into use. The information contained on the cover is meaningful and must be entered clearly and accurately. Generally, once the aircraft is placed on the PACI operations specifications, the initially entered data can be transferred directly to the new AFL cover; however, Quality Control personnel must verify that the entries are correct.

Handling procedures pertaining to this Section are contained in Section 7 of this Bulletin.

2. INSTRUCTIONS FOR COMPLETION

The bracketed items that follow correspond to the bracketed items in **Figure 2-1, Aircraft Flight Log Cover Entries**.

Make the following entries:

[1] AIRCRAFT REGISTRATION – Applicable aircraft registration number.

[2] MODEL / SERIES – Aircraft manufacturer's model designator and series, e.g., G-V, G-350, G-IV, etc.

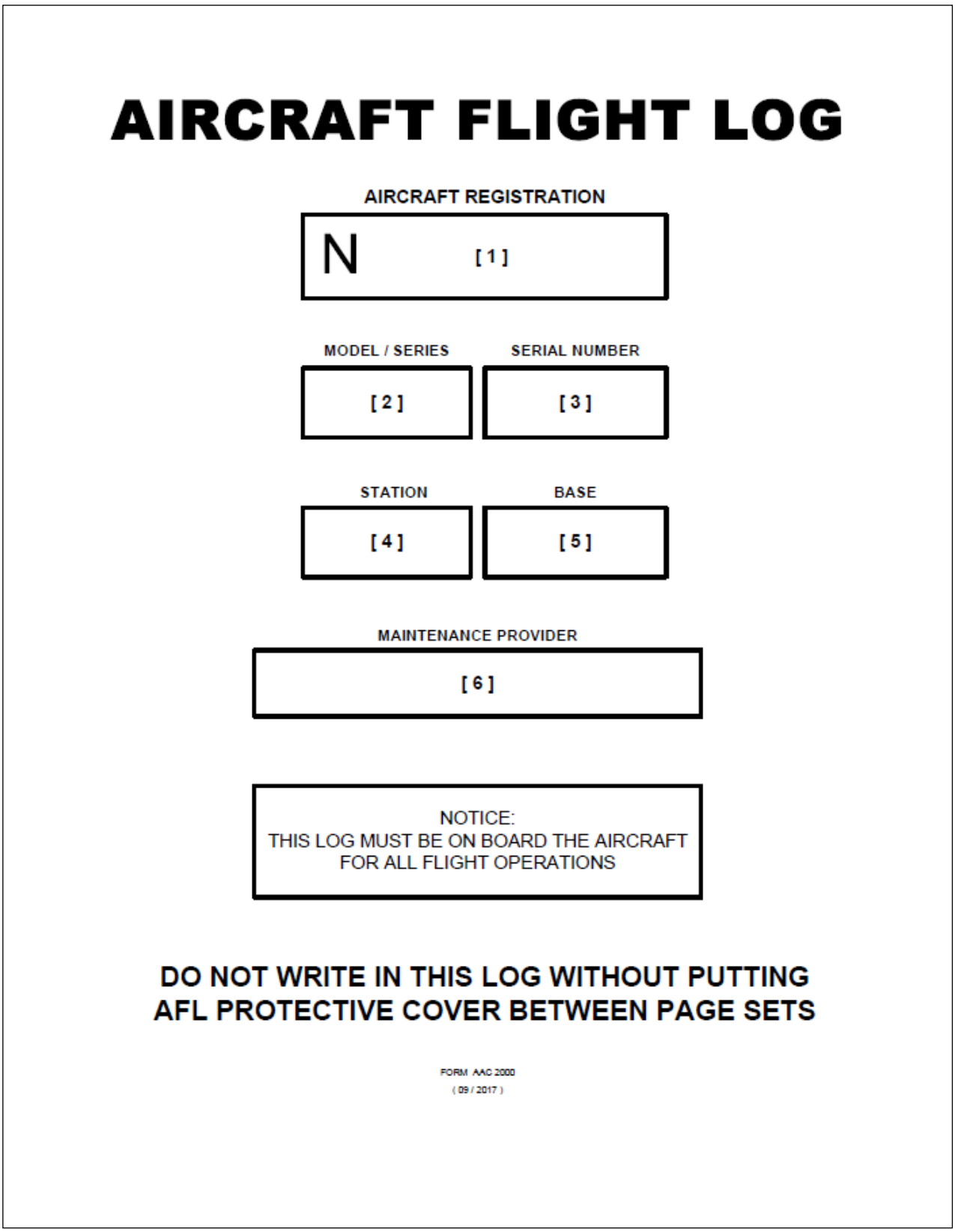
[3] SERIAL NUMBER – Applicable aircraft manufacturer's serial number.

[4] STATION – Aircraft's home base airport designator, e.g., KPTK, KDTW, etc.

[5] BASE – Aircraft's maintenance or flight provider's base letter designator, e.g., GM, PA, etc.

[6] MAINTENANCE PROVIDER – Name of aircraft's maintenance provider or, if a Repair Station, enter the Repair Station's certificate number.

SECTION 2 - AFL COVER



AIRCRAFT FLIGHT LOG

AIRCRAFT REGISTRATION

N [1]

MODEL / SERIES [2]

SERIAL NUMBER [3]

STATION [4]

BASE [5]

MAINTENANCE PROVIDER

[6]

NOTICE:
THIS LOG MUST BE ON BOARD THE AIRCRAFT
FOR ALL FLIGHT OPERATIONS

DO NOT WRITE IN THIS LOG WITHOUT PUTTING AFL PROTECTIVE COVER BETWEEN PAGE SETS

FORM AAC 2000
(09 / 2017)

Figure 2-1, AFL Cover Entries

SECTION 3 - NEW PAGE SET

1. INTRODUCTION

New AFL page sets are routinely initiated by maintenance personnel after all maintenance entries are made and an airworthiness release/approval for return to service is entered on the previous AFL page set; flightcrew members, however, will occasionally initiate a new page set under the circumstances described in Section 7.

Handling procedures pertaining to this Section are contained in Section 7 of this Bulletin.

2. INSTRUCTIONS FOR COMPLETION

The bracketed items that follow correspond to the bracketed items in **Figure 3-1, Initiating New AFL Page Set [White Sheet]**.

Make the following entries:

[1] **AIRCRAFT REGISTRATION** – Enter aircraft's registration number.

[2] **STATION** – Enter aircraft's home base airport designator, e.g., KPTK, KDTW, etc.

[3] **BASE** – Enter aircraft's maintenance or flight provider's base letter designator, e.g., GM, PA, etc.

[4] **DATE 30 DAY VOR SYSTEM OPERATIONAL CHECK – UTC DATE NEXT DUE** – Enter date, MM/DD/YY, VOR Check next due, based on last compliance date + 30 days [not calendar month].

[5] **AIRCRAFT TOTAL TIME BROUGHT FWD** – Enter aircraft Total Time brought forward from previous log page "Aircraft Total Time (ACTT)".

AIRCRAFT TOTAL LANDINGS BROUGHT FWD – Enter aircraft Total Landings brought forward from previous log page "Aircraft Total Landings (ACTL)".

[6] **DMI NOTICE – ACTIVE DMI NUMBERS** – Enter Deferred Maintenance Item (DMI) tracking numbers brought forward from previous log page - less any cleared at the current maintenance visit, plus any new DMI numbers.

[7] **MAINTENANCE TIME LIMITER SUMMARY** – Enter hours and landings remaining to next closest maintenance event. Only items with less than 100 hours or landings should be entered. If greater than 100, enter " **> 100** ".

All entries to be based on previous log page entry less "Total Flight Hours (HRS) This Page", "Total Landings (LDG) This Page", "Estimated APU HRS" (This Page) entered on previous log page, or actual APU hours read from the APU hour meter.

For aircraft with Postflight Checks (PFC) controlled by aircraft flight time, enter the number of hours / tenths remaining to next PFC. For aircraft with Postflight Checks not controlled by aircraft flight time, enter N/A.

Enter Date, MM/DD/YY, in Universal Coordinated Time (UTC), at which the next limiting maintenance task(s) governed by calendar time is/are due, brought forward from previous log page, unless updated at current maintenance visit.

[8] **COMMENTS:** – Any NON-DISCREPANCY comment may be made in this field by flightcrew personnel or maintenance personnel. Generally, maintenance entries will be limited to essential information for the flightcrew to know prior to flight; whereas, flightcrew members may use this field to comment on activities or conditions that existed during the trip, except that no mechanical irregularity discovered during flight time [discrepancy] will be entered.

SECTION 3 - NEW PAGE SET

2. **INSTRUCTIONS FOR COMPLETION** (Cont'd)

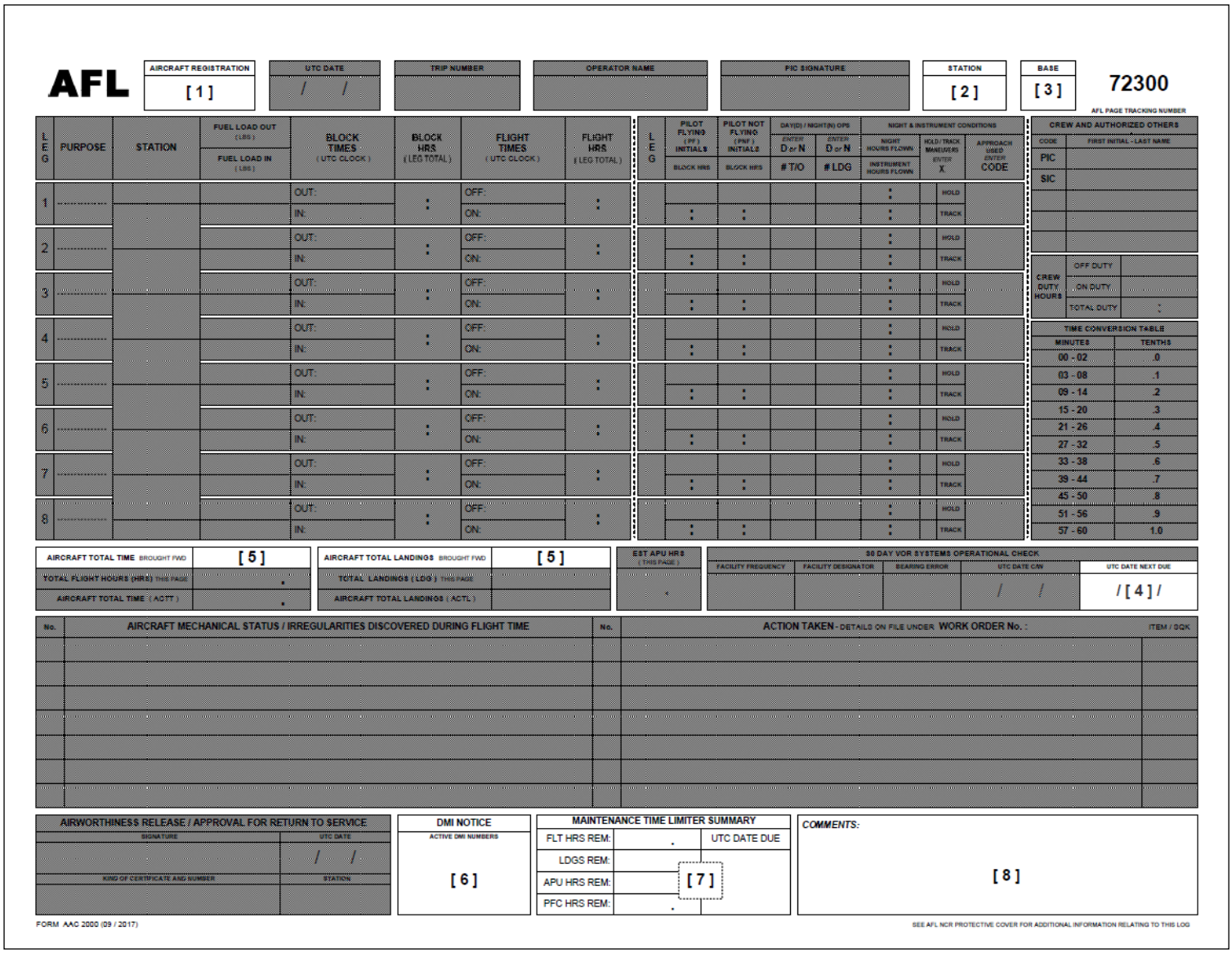


Figure 3-1, Initiating New AFL Page Set [White Sheet]

SECTION 4 - OPERATIONS ENTRIES

1. **INTRODUCTION**

All flight operations trip data entries have specific meaning and use, therefore they must be entered accurately and clearly.

The instructions for completion in this Section are divided into groups to simplify understanding. The order in which the groups and the instructions are presented do not imply the order in which the data is to be entered.

Handling procedures pertaining to this Section are contained in Section 7 of this Bulletin.

2. **INSTRUCTIONS FOR COMPLETION**

The bracketed items that follow correspond to the bracketed items in **Figure 4-1, Operations Entries [White Sheet]**.

Make the following entries:

GROUP 1 - PRELIMINARY DATA

[1] UTC DATE – Enter date, MM/DD/YY, in Universal Coordinated Time (UTC), upon which the crew went on duty.

[2] TRIP NUMBER – Enter trip number as assigned by the Operations Control Center.

[3] OPERATOR NAME – For Part 135 Air Carrier Operations enter: PACI. For Part 91 Private Carriage Operations enter: The Operator's Name as listed on page A001-1 of the 14 CFR Part 91 Operations Letter of Authorization as issued by the FAA. Note that the Purpose Code for all such operations shall be entered as "91 CORP" (ref: **[7]** below).

[4] PIC SIGNATURE – Enter signature of pilot in command (PIC) signifying that to his/her satisfaction the aircraft has been found to be capable of safe flight and that all applicable regulations have been complied with regarding the flight.

[5] CREW AND AUTHORIZED OTHERS – For flight crew members; enter first initial and last name of crewmember adjacent to the code which describes the function the crewmember will be performing during the intended flight. **Pursuant to 14 CFR § 135.109, the Air Carrier will designate a pilot in command (PIC) and a second in command (SIC) for each flight. The PIC, as designated by the Air Carrier, shall remain the PIC at all times during that flight.**

For non-flightcrew members, enter appropriate code to describe the function of the named person on board (see NCR Protective Flap codes, Section 1, Figure 1-2, herein), enter that person's first initial and last name adjacent to the code.

[6] CREW DUTY HOURS – ON DUTY – Enter clock time, using 24-hour clock method (in hours and minutes) in Universal Coordinated Time (UTC), at which the flightcrew reports for the trip assignment (On Duty). The date entered in item **[1]** above, will reflect the date (UTC) the crew went On Duty.

[7] PURPOSE – Enter purpose of trip code extracted from AFL NCR protective flap. See Section 1, Figure 1-2, herein.

[8] STATION – Enter airport station designator of departure (and subsequent arrival **[15]**). Use 3 letter IATA codes for domestic trips (48 contiguous states) and 4 letter ICAO codes for international trips.

SECTION 4 - OPERATIONS ENTRIES

2. **INSTRUCTIONS FOR COMPLETION** (Cont'd)

GROUP 2 – FLIGHT

[9] FUEL LOAD OUT (lbs) – Enter total indicated fuel load in pounds prior to departure. The entry will be abbreviated by reducing the total amount by a factor of .001. Example: A fuel load of 28,550 lbs. would be recorded as 28.55 (28,550 x .001 = 28.55). This is a standard method and must be used consistently.

[10] BLOCK TIMES (UTC CLOCK) – OUT: – Enter clock time, using 24 hour clock method (in hours and minutes) in Universal Coordinated Time (UTC), at the moment the aircraft starts moving under its own power for the purpose of flight.

[11] FLIGHT TIMES (UTC CLOCK) – OFF: – Enter clock time, using 24 hour clock method (in hours and minutes) in Universal Coordinated Time (UTC), at the moment the aircraft leaves the surface of the earth for flight.

[12] FLIGHT TIMES (UTC CLOCK) – ON: – Enter clock time, using 24 hour clock method (in hours and minutes) in Universal Coordinated Time (UTC), at the moment the aircraft touches down at the termination of the trip leg.

[13] BLOCK TIMES (UTC CLOCK) – IN: – Enter clock time, using 24 hour clock method (in hours and minutes) in Universal Coordinated Time (UTC), at the moment the aircraft stops moving under its own power at the termination of the trip leg.

[14] FUEL LOAD IN (lbs) – Enter total indicated fuel load in pounds at the termination of the leg. Use the method described in **[9]** above.

[15] STATION – Enter airport station designator at arrival. Use 3 letter IATA codes for domestic trips (48 contiguous states) and 4 letter ICAO codes for international trips.

[16] BLOCK HRS (LEG TOTAL) – Compute (difference between **[10]** and **[13]**) and enter the total block time, in hours and tenths, for the leg.

[17] FLIGHT HRS (LEG TOTAL) – Compute (difference between **[11]** and **[12]**) and enter the total flight time, in hours and tenths, for the leg.

GROUP 3 - CREW FLIGHT EXPERIENCE DATA

Entries made while on board the aircraft. Repeat these entries as many times as required to describe all *Pilot Flying* and *Pilot Not Flying* experience for each of the available legs.

[18] LEG – Enter the trip LEG number corresponding to the LEG number in the Group 1 field next to **[7]**, Purpose.

NOTE: In items **[19]** and **[20]** "Pilot Flying" and "Pilot Not Flying" have the following meanings: *Pilot Flying* is that person occupying an FAA designated pilot seat on the flight deck during flight and is the sole manipulator of the controls. *Pilot Not Flying* is that person occupying an FAA designated pilot seat on the flight deck during flight and, although capable, is not manipulating the controls.

[19] PILOT FLYING (PF) INITIALS/BLOCK HRS – In the upper block enter initials of *Pilot Flying*; then enter the Block Hrs (hours and tenths) flown by the *Pilot Flying* in the lower block.

2. **INSTRUCTIONS FOR COMPLETION** (Cont'd)

GROUP 3 - CREW FLIGHT EXPERIENCE DATA

[20] PILOT NOT FLYING (PNF) / BLOCK HRS – In the upper block enter initials of *Pilot Not Flying*; then enter the Block Hrs (hours and tenths) flown by the *Pilot Not Flying* in the lower block.

- **DAY (D) / NIGHT (N) OPS**

[21] ENTER D *or* N / # T/O – In the upper block enter the letter **D** to indicate Day conditions or **N** to indicate Night conditions ("Night" is the period of time beginning 1 hour after sunset and ending 1 hour before sunrise), then enter the number of Takeoffs performed in the lower block.

[22] ENTER D *or* N / # LDG – In the upper block enter the letter **D** to indicate Day conditions or **N** to indicate Night conditions ("Night" is the period of time beginning 1 hour after sunset and ending 1 hour before sunrise), then enter the number of Landings performed in the lower block.

Note that each Touch and Go performed during training or check rides will be counted as 1 landing even if the aircraft does not come to a complete stop (rollers).

- **NIGHT & INSTRUMENT CONDITIONS**

[23] NIGHT HOURS FLOWN / INSTRUMENT HOURS FLOWN – Time, in hours and tenths – for night hours flown, in upper block and for instrument hours flown in lower block.

[24] HOLD / TRACKING MANEUVERS / ENTER X – Enter an **X** in the block adjacent to HOLD and/or TRACK to signify Pilot identified in **[19]** had actual instrument experience in Holding and/or intercepting and Tracking a course during the leg.

[25] TYPE APPROACH USED / *ENTER* P, NP *or* PL – See Section 1, Figure 1-2, NCR Protective Flap, for Type Approach Codes that relate to P (Precision), NP (Non-Precision) or PL (Precision-Like) approaches. If the approach used is not listed, refer to the current OpSpec C052. Enter appropriate letter(s) to signify type approach used.

GROUP 4 – FINAL DATA

[26] EST APU HRS (THIS PAGE) – Enter total estimated use of the APU (in hours and tenths) for all leg activity on one log page. See Section 3., paragraph 2., item **[7]**.

NOTE: This data entry is required only if a new AFL page set is initiated while the aircraft is away from its maintenance base.

[27] CREW DUTY HOURS / OFF / ON / TOTAL – Enter clock time, using 24 hour clock method (in hours and minutes) in Universal Coordinated Time (UTC), at which the flightcrew is released from the trip assignment (OFF DUTY). Determine the total duty in hours and tenths, and enter this time in the TOTAL DUTY block.

SECTION 4 - OPERATIONS ENTRIES

2. **INSTRUCTIONS FOR COMPLETION** (Cont'd)

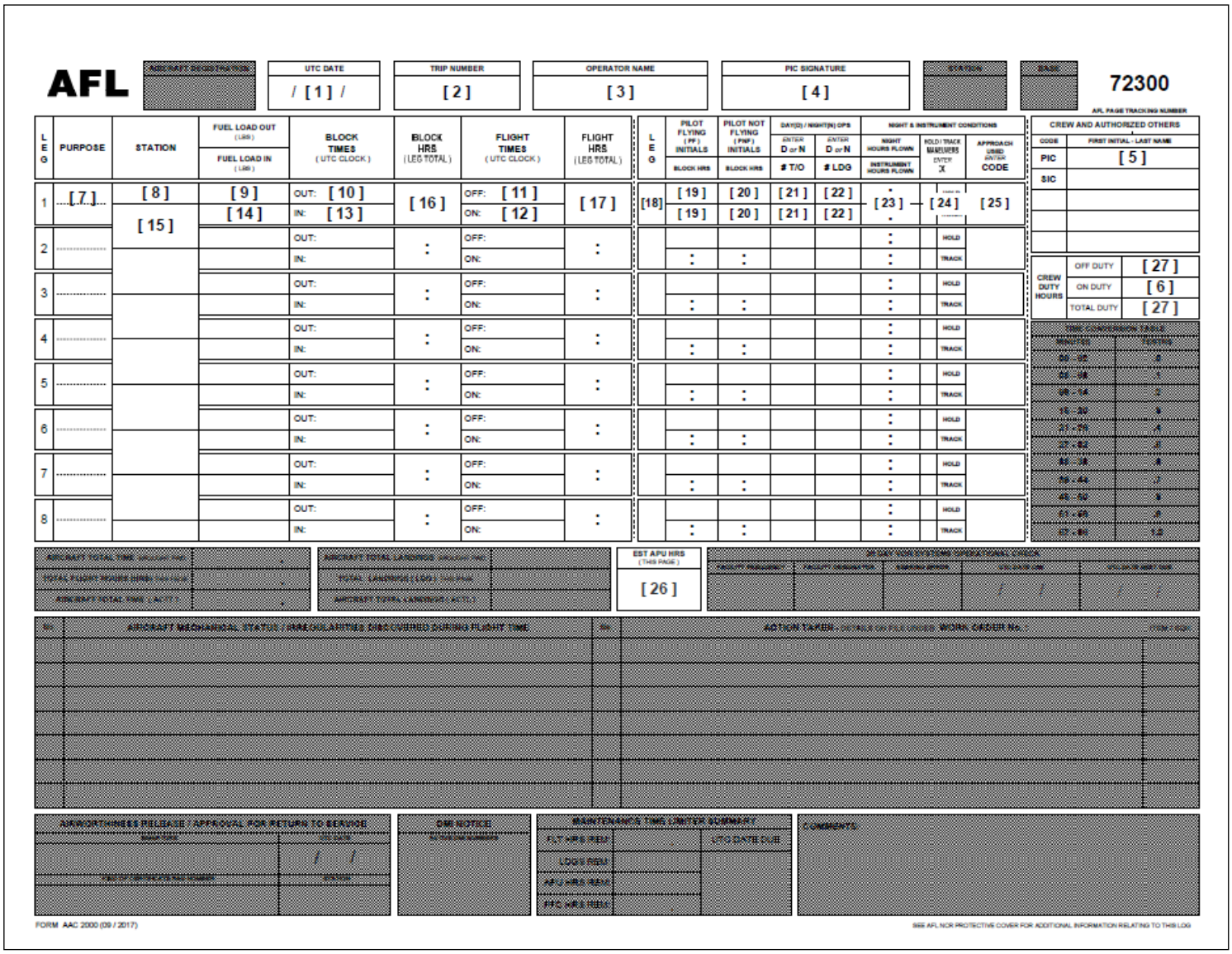


Figure 4-1, Operations Entries [White Sheet]

SECTION 5 - FLEXIBLE ENTRIES

1. INTRODUCTION

There are fields in the Aircraft Flight Log that are not initiated on a routine basis but are an essential part of the AFL data entry process. The term "Flexible Entries" means that the entry fields can be used by both flightcrew members and maintenance personnel and that these entry fields are not strictly the responsibility of one group.

Handling procedures pertaining to this Section are contained in Section 7 of this Bulletin.

2. INSTRUCTIONS FOR COMPLETION

The bracketed items that follow correspond to the bracketed numbers in **Figure 5-1, Flexible Entries [White Sheet]**.

Make the following entries:

[1] AIRCRAFT TOTAL TIME BROUGHT FWD / TOTAL FLIGHT HOURS (HRS) THIS PAGE / AIRCRAFT TOTAL TIME (ACTT) – When a trip is finished or when the log page if full, a new Aircraft Total Time (ACTT) must be established and recorded on the log page. Sum the “Flight HRS (Leg Total)” entries in hours and tenths (see Section 4., paragraph 2., item **[17]**). Enter the “Leg Total” number in the “Total Flight Hours (HRS) This Page” block; add this number to the “Aircraft Total Time Brought FWD” number that was previously entered and enter the sum in the “Aircraft Total Time (ACTT)” block.

[2] AIRCRAFT TOTAL LANDINGS BROUGHT FWD / TOTAL LANDINGS (LDG) THIS PAGE / AIRCRAFT TOTAL LANDING (ACTL) – When a trip is finished or when the log page if full, a new Aircraft Total Landings (ACTL) must be established and recorded on the log page. Sum the “# LDG” entries (See Section 4., paragraph 2., item **[22]**). Enter the total number of landings in the “Total Landings (LDG) This Page” block; add this number to the “Aircraft Total Landings Brought FWD” number that was previously entered and enter the sum in the “Aircraft Total Landings (ACTL)” block.

[3] 30 DAY VOR SYSTEM OPERATIONAL CHECK – Follow the instructions contained on the AFL NCR Protective Flap, Section 1, Figure 1-2. This check is required to be performed and recorded every 30 calendar days. See Section 7, paragraph 2., D., (1), for VOR check options.

The VOR check is normally performed by a flightcrew member; however, an appropriately rated repair station may make the check, as provided for in 14 CFR § 91.171(d). In this case, the block entitled "FACILITY DESIGNATOR" can be used for the repair station's certificate number and the block entitled "FACILITY FREQUENCY" can be used to record the signal frequency radiated for the test.

When the VOR check is accomplished by the flight crew, the signature of the PIC constitutes completion of the VOR check. See Section 4., paragraph 2., Group 1, item **[4]**.

[4] AIRCRAFT MECHANICAL STATUS/IRREGULARITIES DISCOVERED DURING FLIGHT TIME – Pursuant to 14 CFR § 135.23(f) and § 135.65, the pilot in command shall enter *or have entered* in the aircraft maintenance log [this AFL] each mechanical irregularity that comes to the attention of the pilot in command during flight time. To satisfy the requirement of 14 CFR § 135.23(f), "During Flight Time" encompasses the period before, during, and after completion of a flight. Mechanical irregularities discovered by the pilot during the preflight or postflight walk around checks would be entered.

For each mechanical entry made, itemize the entry by entering a sequential number in the header "No." adjacent to the entry.

Maintenance personnel may make entries in this field relating to the "Aircraft Mechanical Status". Commonly, entries relating to operational flight check requirements and ferry flight requirements would be made but are not limited to just these. Any known mechanical irregularity may be written up in the AFL by maintenance personnel if the flight crew neglects to do so.

SECTION 5 - FLEXIBLE ENTRIES

2. **INSTRUCTIONS FOR COMPLETION** (Cont'd)

[5] ACTION TAKEN – DETAILS ON FILE UNDER WORK ORDER No.: – Normally this field is initiated by maintenance personnel (see Section 6., paragraph 2.); however, from time to time flightcrew personnel may make entries in the Action Taken field of white page in the AFL. Typically, these entries would address the results of an operational flight check or contain the required entries of a deferral.

For each "Action Taken" entry made, itemize the entry by entering the sequential number that corresponds to its mechanical irregularity or aircraft mechanical status statement.

If the entry is made by a flightcrew member, the Work Order No. and Item / Sqk entries will not be made.

[6] DMI NOTICE / ACTIVE DMI NUMBERS – Whenever a deferred maintenance item (DMI) is generated, either by flightcrew personnel or by maintenance personnel, the DMI tracking number is to be entered in the space provided. The numbers are to be brought forward to a new flight log page set as described in Section 3, paragraph 2., item **[6]**.

[7] MAINTENANCE TIME LIMITER SUMMARY – Normally this field is initiated by maintenance personnel; however, from time to time flightcrew personnel will make entries in this field when initiating a new page set during a trip. Follow item **[7]** in Section 3., paragraph 2., when so required.

[8] COMMENTS – Any NON-DISCREPANCY comment may be made in this field by flightcrew personnel or maintenance personnel. Generally, maintenance entries will be limited to essential information for the flightcrew to know prior to flight; whereas, flightcrew members may use this field to comment on activities or conditions that existed during the trip, except that no mechanical irregularity discovered during flight time [discrepancy] will be entered.

SECTION 5 - FLEXIBLE ENTRIES

2. **INSTRUCTIONS FOR COMPLETION** (Cont'd)

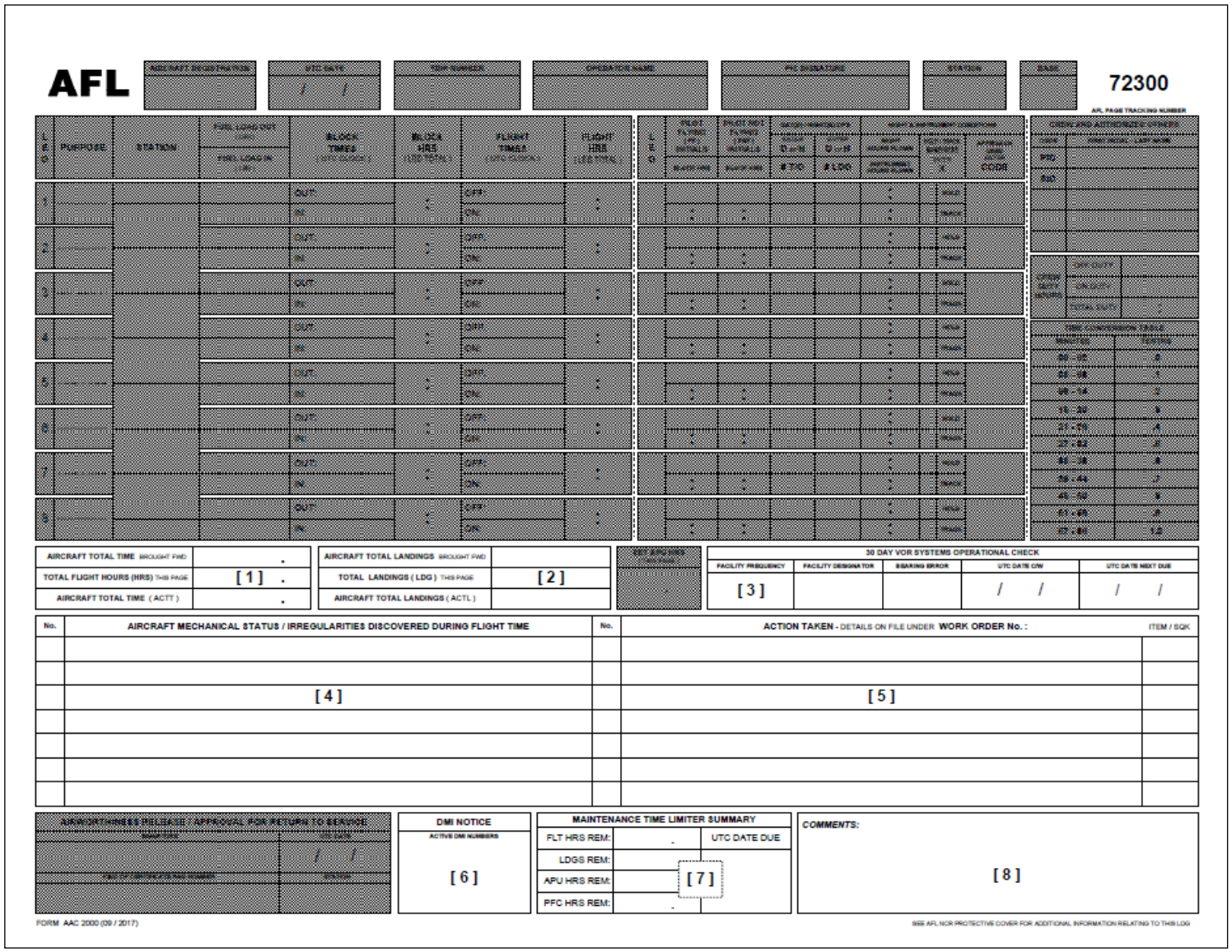


Figure 5-1, Flexible Entries [White Sheet]

SECTION 6 - MAINTENANCE ENTRIES

1. **INTRODUCTION**

The required maintenance entries are essentially limited to two entries, corrective actions and an airworthiness release. These entries are made on the yellow sheet of the AFL page group.

Handling procedures pertaining to this Section are contained in Section 7 of this Bulletin.

2. **INSTRUCTIONS FOR COMPLETION**

The bracketed items that follow correspond to the bracketed numbers in **Figure 6-1, Maintenance Entries [Yellow Sheet]**.

Make the following entries:

- **MECHANICAL IRREGULARITY CORRECTIVE ACTIONS**

[1] ACTION TAKEN – DETAILS ON FILE UNDER WORK ORDER No.: Enter the number of the maintenance work order containing the details of the mechanical irregularity corrective action(s) entered in **[1.2]**. If no corrective action is required to be entered but other work was performed on the aircraft, the number of the maintenance work order containing the other work will be entered.

[1.1] ITEM / SQK – The maintenance work order item and / or squawk number corresponding to the mechanical irregularity corrective action entered in **[1.2]**.

[1.2] ACTION TAKEN FIELD – The corrective action taken for the mechanical irregularities entered in Section 5., paragraph 2., item **[4]**.

- **AIRWORTHINESS RELEASE / APPROVAL FOR RETURN TO SERVICE**

The entries in this field of the AFL log page constitute an Airworthiness Release under 14 CFR 135.443 for aircraft maintained under the requirements of 14 CFR 135.411(a)(2) and Approval for Return to Service under 14 CFR 91.407(a) for aircraft maintained under the requirements of 14 CFR 135.411(a)(1), Part 43 and Part 91.

AIRWORTHINESS RELEASE:

For aircraft that are type certificated, excluding any pilot seat, for ten (10) seats or more and being maintained under the Certificate Holder's Continuous Airworthiness Maintenance Programs, this airworthiness release means:

(1) The work accomplished was performed in accordance with the requirements of the certificate holder's manual;

(2) All items required to be inspected were inspected by an authorized person who determined that the work was satisfactorily completed;

(3) No known condition exists that would make the aircraft unairworthy;

(4) So far as the work performed is concerned, the aircraft is in condition for safe operation.

APPROVAL FOR RETURN TO SERVICE:

Is for aircraft that are type certificated for a passenger seating configuration, excluding any pilot seat, of nine (9) seats or less, or any aircraft operated under 14 CFR Part 91, and being maintained under 14 CFR Parts 91 and 43. It includes aircraft subject to 14 CFR 135.419 and 135.421 as well. When applicable, this return to service release means:

2. **INSTRUCTIONS FOR COMPLETION** (Cont'd)

- **AIRWORTHINESS RELEASE / APPROVAL FOR RETURN TO SERVICE**

  (1) That, under 14 CFR Section 43.9, the maintenance, preventive maintenance or alterations, as described in the Aircraft Flight Log and the work order referenced, have been performed satisfactorily in accordance with the Federal Aviation Regulations and that approval given constitutes approval for return to service of the aircraft only for that work performed.

  (2) That, under 14 CFR Section 43.11, the inspection(s) required under 14 CFR Section 91.409 or Section 135.419 for this aircraft, as described on the Aircraft Flight Log and in the work order referenced, have been accomplished and that the aircraft was determined to be in an airworthy condition, and is approved for return to service.

[2.1] SIGNATURE – Full ("endorsement") signature of person entering the release.

[2.2] UTC DATE – Date release entered **–** MM/DD/YY **–** in Universal Coordinated Time (UTC).

[2.3] KIND OF CERTIFICATE AND NUMBER – Kind of certificate (mechanic, repairman, or air agency [repair station] certificate identity; Mechanics must indicate rating(s) held, i.e., Airframe ("A") and / or Powerplant ("P"), Repairman must indicate "REP", Repair Stations must indicate "FAA CRS" or "CRS" to indicate "Certificated Repair Station"). The certificate number is to follow the Kind of Certificate.

[2.4] STATION – Airport station designator at which release was entered.

SECTION 6 - MAINTENANCE ENTRIES

2. **INSTRUCTIONS FOR COMPLETION** (Cont'd)

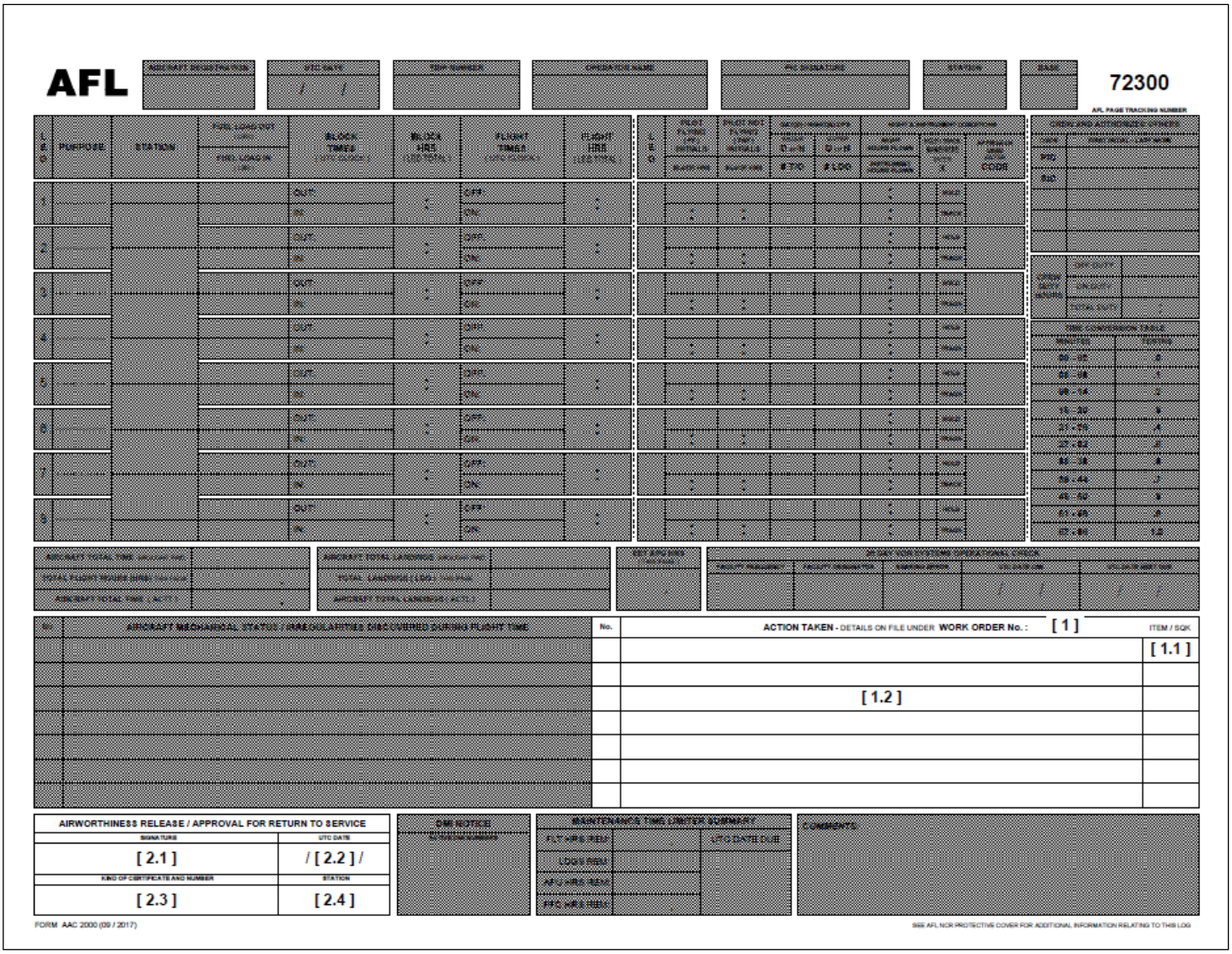


Figure 6-1, Maintenance Entries [Yellow Sheet]

SECTION 7 - AFL PROCEDURAL NOTES

1. **INTRODUCTION**

These procedural notes are to be used by flightcrew and maintenance personnel. These notes and procedures have been arranged for relevancy to the sections in this Bulletin.

2. **PROCEDURAL NOTES**

A. **Section 1 - General**:

(1) The AFL pages are "No Carbon Required" (NCR) paper, the AFL protective flap must be placed between page sets to prevent transference from one set to the next.

(2) The AFL is required by 14 CFR § 135.65 and must be carried on board the aircraft for all flights and made available to the FAA or NTSB on demand.

(3) General entry requirements include:

(a) With the exception of the signature of the PIC, all entries are to be printed legibly and applied in a manner that will assure transference on to the duplicate and triplicate sheets.

(b) Use only terminology acceptable throughout the aircraft industry and abbreviations/acronyms used by the aircraft manufacturer.

(c) Entries must be made in dark ink. Use of pencil is prohibited.

(4) Special entries requirements include:

NOTE: If any of the following entries are made using a preprinted rubber stamp, all pages within the page set must be stamped.

(a) If a log page set is used to record a maintenance action and no flight occurs, the following entry must be made across the white sheet of the page set:

"NO FLIGHT - MAINTENANCE USE ONLY"

(b) For traceability, enter the aircraft Registration Number, Station, Base, ACTT and ACTL brought forward on the page set.

(c) The white sheet is to be removed and forwarded to Flight Operations, the yellow sheet is to be removed and retained on file in the aircraft's historical records.

(5) In the event a blank log page set is mutilated or becomes unusable, the log page set must be voided by entering the following across the white sheet of the page set:

"VOID"

(a) For traceability, enter the aircraft Registration Number, Station, Base and ACTT and ACTL brought forward on the page set.

(b) The white sheet is to be forwarded to Flight Operations, the yellow sheet is to be removed and retained on file in the aircraft's historical records.

SECTION 7 - AFL PROCEDURAL NOTES

2. **PROCEDURAL NOTES** (Cont'd)

A. **Section 1 – General**:

(6) In the event the white and / or yellow sheets from one page set are lost, the pink sheet of that serial numbered set may be removed from the AFL binder and used for maintenance record retention. Photocopies may be made of this pink sheet for flight operations record retention, as required. In this case, the following entry should be made on the photocopy:

"TRUE COPY"

(7) The complete Aircraft Flight Log book will be physically routed to Flight Operations for review whenever there is a crew change at the KPTK base.

B. **Section 2 – New Page Set**:

(1) The initiation of a new AFL page set is routinely accomplished by maintenance personnel. There are, however, occasions when flightcrew personnel will initiate a new page set. The occasions requiring flightcrew initiation are any time **–**

(a) There is a change of any flightcrew member, including an International Relief Pilot.

(b) There is a change in primary trip number.

(c) All "Leg" fields are exhausted.

(d) When maintenance has been performed and an airworthiness release/approval for return to service has been entered in the log.

(e) When Crew Duty Time has been exhausted.

(f) The PIC chooses.

(2) When the "APU Time Remaining" information is brought forward to the new page set by **flightcrew personnel** it should include a reduction in the APU time remaining through estimation-unless a direct reading is taken from the APU hour meter or EFIS presentation. Estimation of APU time used and the resultant time remaining is essential to accomplishing required maintenance on the APU in a timely manner. If the APU time remaining gets to within twenty-five hours or starts it is the responsibility of the flightcrew to monitor APU time used on a trip. If the APU time remaining will run out or does run out while on a trip the APU maintenance at the aircraft's maintenance provider's base must be contacted for disposition concerning continued operation of the APU.

(3) When the "APU Time Remaining" information is brought forward to the new page by **maintenance personnel** the entries made will be based on actual readings of the APU hour meter or EFIS presentation, as recorded on the aircraft's Postflight Check form. Should maintenance activities involving extensive APU operation be performed after the Postflight Check is accomplished, the APU hour meter and / or start / cycle meter reading should be obtained and applied to the time remaining computations to be entered on the new page.

C. **Section 3 - Operations Entries**:

(1) When entering the "# LDG" (number of landings) the total count for the leg must include any touch and go landings. This touch and go landing count applies whenever aircraft "weight on wheels" is experienced at landing and the throttles are at or near idle power and then full or near full power is applied for the takeoff maneuver.

(2) After the trip has concluded remove all initiated white sheets from the AFL and forward/deliver them to flight operations of the aircraft’s home base. These pages are to be FAX transmitted to flight operations.

2. **PROCEDURAL NOTES** (Cont'd)

D. **Section 4 – Flexible Entries**:

(1) The VOR check is due each thirty (30) calendar days. A common mistake is to enter the next due date based on one month, i.e., same day one month later. Should this occur, maintenance personnel must correct the next due date when bringing it forward to a newly initiated page set (see Section 3, paragraph 2., item **[4]**).

NOTE: If necessary, flightcrew members may use other VOR check options given in 14 CFR 91.171(b). If an option is used that allows a 6^{o} bearing error, the identification of the 91.171(b) subparagraph used must be identified in the "Comments" field of the log page.

(2) The "Comments" field may be used by **maintenance personnel** to inform the outbound flightcrew of pertinent information such as, but not limited to:

- Deferral information; "Life Rafts Removed", "DMI # 34-5 Cleared", "2 Days Remain On DMI # 73-5", etc.
- Significant maintenance performed not described on the previous AFL page; "Left Engine Replaced", "Right Engine FADEC Replaced", "NLG Replaced", etc.
- Special in-flight checks may be requested to support maintenance activities; "Please C/W Pack Inlet Valve Ops Test This Trip, Initiate CMP Card 21-33, Record Irregularities In AFL", "Please Check Lav Door Ops At Altitude", etc.

The "Comments" field may be used by **flightcrew personnel** to inform flight operations personnel or maintenance personnel of Non-Airworthiness / Non-Discrepant events or conditions such as, but not limited to:

- Intangibles; "Passenger Complained Galley Area Dirty", etc.
- Tangibles; "Need New AFL Ring Binder", "Passenger Says Candy Is Too Hard", "Finger Prints All Over Lav Mirror", etc.

(3) In addition to the "Aircraft Mechanical Status / Mechanical Irregularities Discovered During Flight" entry requirements contained in Section 5., paragraph 2., item **[4]**, **flightcrew personnel** shall report occurrences that may require special inspections to determine continued airworthiness of the aircraft; they include, but are not limited to:

(a) Hard or overweight landing;

(b) Aircraft runway departure;

(c) Lightning strike;

(d) Flight into hail or volcanic ash;

(e) Severe turbulence or windshear encounter;

(f) Flap airspeed exceeded;

(g) Maximum cabin pressure exceeded;

(h) RVSM altitude keeping errors;

(i) EICAS MDAU fault messages.

2. **PROCEDURAL NOTES** (Cont'd)

D. **Section 4 – Flexible Entries**:

(4) Deferral Notices are not limited to maintenance personnel entry, **flightcrew personnel** should enter the applicable DMI tracking number in this field [on the white sheet] if they defer an item while on a trip.

E. **Section 5 – Maintenance Entries**:

(1) In some cases the corrective action work described in the maintenance work order for a pilot reported mechanical irregularity involved multiple itemized steps, such as troubleshooting, operational checks, etc., that work is too lengthy and not practical to transcribe to the AFL; in these cases a condensed version of the collective corrective actions may be entered. The true meaning of the corrective action must be preserved in the transcription to ensure the PIC has a full understanding of the corrective action.

(a) Part and serial numbers of components changed in conjunction with a corrective action need not be transcribed to the AFL, provided they are posted in the work order.

(b) For traceability, each corrective action transcribed to the AFL must be sequentially numbered to correspond to the sequentially numbered mechanical irregularity.

(2) When all entries have been made on the yellow sheet of the AFL, remove the page and file it with the aircraft's historical records. Retain on file and transfer as required by 14 CFR 135.441 or 91.417, as appropriate.

(3) When a new AFL book is to be put into service, retain at least the last five previous AFL pink sheets, or up to the last Airworthiness Release/Approval for Return to Service entry, in the AFL ring binder. When a new Airworthiness Release/Approval for Return to Service entry has been entered, these pink sheets may be removed.