



**THIS BULLETIN IS FAA APPROVED FOR ENGINEERING DESIGN**

**SUBJECT:** Mooney M20R and M20TN with United Instruments, Inc. 5934 series altimeters Factory installed, as well as, altimeters ordered through Mooney Service Parts Department during the specified time frame of the United Instruments, Inc. Service Bulletin No. 13 dated March 25, 2016 .

**MODELS/ SN  
AFFECTED:** M20R - 29-0523 thru 29-0525 (Factory installed)  
M20TN - 31-0140 thru 31-0143 (Factory installed)

**TIME OF  
COMPLIANCE:** **Comply with this AD within the compliance times specified, unless already done.**

**INTRODUCTION:** The purpose of this Service Bulletin is to identify the United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016 and FAA AD 2017-04-06 United Instruments, Inc.: Amendment 39-18801; Docket No. FAA-2016-9345; Directorate Identifier 2016-CE-028-AD.

This AD applies to United Instruments, Inc. 5934 series altimeters that were manufactured between January 2015 and February 2016 and installed in airplanes and helicopters.

(1) The specific affected serial number altimeters can be found in United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016.

(2) Altimeters that have been corrected by United Instruments, Inc. following Service Bulletin No. 13, dated March 25, 2016, are not affected by this AD and no further action is necessary.

(3) Altimeters that have been corrected by United Instruments, Inc. can be identified by a yellow dot, approximately 1/4 inch (6 mm) in diameter, located approximately 1 inch (25 mm) to the left side of the nameplate. The corrected altimeters will also have a letter "M," approximately 1/8 inch (3mm) high, metal stamped on the nameplate after the name "ALTIMETER."

**The attached compliance card needs to be filled out and returned to Mooney International Corporation upon completion of this Service Bulletin M20-326.**

**INSTRUCTIONS:** **Read entire procedures before beginning work.**

**WARRANTY:** Refer to United Instruments, Inc. Service Bulletin No. 13 Dated March 25, 2016

**REFERENCE  
DATA:** 1. United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016  
2. FAA AD 2017-04-06 United Instruments, Inc.: Amendment 39-18801; Docket No. FAA-2016-9345; Directorate Identifier 2016-CE-028-AD.

**PARTS LIST:** Refer to United Instruments, Inc. Service Bulletin No. 13 Dated March 25, 2016



**THIS BULLETIN IS FAA APPROVED FOR ENGINEERING DESIGN**

**MOONEY INTERNATIONAL CORPORATION**  
KERRVILLE, TEXAS 78028 - FAX 830-257-4635

SERVICE (BULLETIN) (INSTRUCTION) NO. \_\_\_\_\_ HAS BEEN COMPLIED  
WITH ON AIRCRAFT MODEL \_\_\_\_\_ SERIAL NUMBER \_\_\_\_\_

Tach. Time: \_\_\_\_\_ N-Number \_\_\_\_\_ (Reg. No.)  
Owner: \_\_\_\_\_ Date of Compliance: \_\_\_\_\_  
\_\_\_\_\_ Complied  
By: \_\_\_\_\_

Inspection Report: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Form 07-0001

PLACE  
STAMP  
HERE

**MOONEY INTERNATIONAL CORPORATION**  
ATT'N: TECHNICAL SUPPORT  
165 Al Mooney Road, North  
Kerrville, Texas 78028

**SEND TO: Mooney International Corporation**  
165 Al Mooney Road North  
Kerrville, TX 78028  
FAX: (830) 257-4635 or EMAIL [support@mooney.com](mailto:support@mooney.com)

**Figure SB M20-326-1 - Compliance Card**



## **UNITED INSTRUMENTS, INC.**

3625 Comotara Avenue, Wichita, Kansas 67226  
Phone: (316) 636-9203 Telefax: (316) 636-9243

**Service Bulletin No. 13**  
**March 25, 2016**

### **SERVICE BULLETIN**

**TO:** Owner or user of certain United Instruments, Inc. 5934 Series Altimeters

**TITLE:** Diaphragm Assemblies

**PURPOSE:** Replacement of nonconforming diaphragm assemblies in the affected altimeters.

**EFFECTIVITY:** This service bulletin applies to specific 5934 Series Altimeters that were manufactured between January 2015 and February 2016, which are identified on the attached Table of Affected Serial Numbers. See Table 1 attached.

**GENERAL:** The altimeters covered by this bulletin may display higher altitude than actual altitude.

**DESCRIPTION:** Altimeters identified on Table 1 are susceptible to developing a slow diaphragm leak which would affect the accuracy of the altimeters.

**CORRECTIVE ACTION:** Replace with new diaphragm assembly (P/N 1114-033610).

#### **COMPLIANCE AND HANDLING INSTRUCTIONS:**

An error in the barometric setting of affected altimeters identified in Table 1 is an indication of diaphragm leakage.

##### **For altimeters currently installed in aircraft:**

Check the serial number on the altimeter nameplate to determine whether it is listed in Table 1. If so, remove the altimeter as soon as possible and return it to United Instruments, or to a designated service facility, for correction in accordance with United Instruments instructions.

##### **For altimeters NOT currently installed in aircraft:**

Return all affected altimeters identified in Table 1 to United Instruments for correction no later than March 31, 2017.

##### **Return Instructions:**

When returning the altimeter to United Instruments, or to a designated service facility, each altimeter should be labeled "SB-13", and adequately wrapped to protect it from damage, and packaged in a container no smaller than 8"x8"x8". Return the altimeter by United Parcel Service (UPS) Ground Service.

**IDENTIFICATION OF CORRECTED ALTIMETERS:**

Altimeters that have been corrected in accordance with this service bulletin will be identified with a yellow dot, approximately 1/4 inch (6 mm) in diameter, approximately 1 inch (25 mm) to the left side of the nameplate, and letter 'M', approximately 1/8 inch (3 mm) high will be metal stamped on the nameplate after the name 'ALTIMETER'.

**Credit Information**

Removal and Installation: For an altimeter identified in Table 1 which is installed in an aircraft, the actual charges incurred for removal and re-installation (to include required check for static system leaks) will be reimbursed up to a maximum of \$120 for each aircraft. A completed claim form (attached) must be submitted by March 31, 2017 to be eligible for reimbursement.

Freight: Ship by United Parcel Service (UPS) Ground Service freight collect, Account No.

0(zero)EWO(zero)43 to one of the following:

United Instruments, Inc., 3625 Comotara Avenue, Wichita, KS 67226, 316-636-9203, [customerservice@unitedinst.com](mailto:customerservice@unitedinst.com); or to a designated service facility (contact details may be found at [www.unitedinst.com](http://www.unitedinst.com)).

Any updates concerning this service bulletin or other service information will be posted on United Instruments' website: [www.unitedinst.com](http://www.unitedinst.com).



UNITED INSTRUMENTS, INC.  
 3625 COMOTARA AVE  
 WICHITA, KS 67226  
 Ph: 316-636-9203 fx: 316-636-9243  
[customerservice@unitedinst.com](mailto:customerservice@unitedinst.com)

Service Bulletin No. 13  
 MARCH /25/2016

# CLAIM FORM

OWNER NAME: \_\_\_\_\_ COMPANY NAME \_\_\_\_\_

ADDRESS 1: \_\_\_\_\_

ADDRESS 2: \_\_\_\_\_

ACFT MAKE: \_\_\_\_\_ MODEL: \_\_\_\_\_ SERIAL #: \_\_\_\_\_

INST P/N: 5934 CODE A: \_\_\_\_\_ S/N REMOVED: \_\_\_\_\_ S/N INSTALLED: \_\_\_\_\_

DATE COMPLETED: \_\_\_\_\_ CERTIFIED MECH.: \_\_\_\_\_

FBO NAME: \_\_\_\_\_ CERT. NO.: \_\_\_\_\_

FBO ADDRESS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

COUNTRY: \_\_\_\_\_

DO NOT WRITE BELOW THIS LINE:

---



---



---



---



---



---

Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

1	507335	42	507414	83	507487	124	507587	165	507636
2	507336	43	507415	84	507488	125	507588	166	507637
3	507337	44	507416	85	507489	126	507589	167	507638
4	507338	45	507417	86	507490	127	507590	168	507639
5	507340	46	507418	87	507491	128	507591	169	507640
6	507341	47	507419	88	507521	129	507592	170	507641
7	507342	48	507420	89	507547	130	507593	171	507642
8	507347	49	507421	90	507548	131	507594	172	507643
9	507370	50	507422	91	507549	132	507595	173	507644
10	507371	51	507423	92	507550	133	507596	174	507645
11	507372	52	507424	93	507551	134	507597	175	507646
12	507373	53	507425	94	507552	135	507598	176	507647
13	507374	54	507427	95	507553	136	507599	177	507648
14	507375	55	507428	96	507554	137	507600	178	507649
15	507376	56	507429	97	507555	138	507601	179	507650
16	507377	57	507430	98	507556	139	507602	180	507651
17	507378	58	507431	99	507562	140	507603	181	507652
18	507379	59	507432	100	507563	141	507604	182	507653
19	507380	60	507433	101	507564	142	507605	183	507654
20	507381	61	507434	102	507565	143	507614	184	507655
21	507382	62	507435	103	507566	144	507615	185	507656
22	507383	63	507436	104	507567	145	507616	186	507657
23	507384	64	507437	105	507568	146	507617	187	507658
24	507385	65	507438	106	507569	147	507618	188	507659
25	507386	66	507439	107	507570	148	507619	189	507660
26	507387	67	507440	108	507571	149	507620	190	507661
27	507388	68	507441	109	507572	150	507621	191	507662
28	507393	69	507442	110	507573	151	507622	192	507663
29	507398	70	507443	111	507574	152	507623	193	507664
30	507399	71	507444	112	507575	153	507624	194	507665
31	507400	72	507445	113	507576	154	507625	195	507666
32	507404	73	507446	114	507577	155	507626	196	507667
33	507405	74	507452	115	507578	156	507627	197	507668
34	507406	75	507453	116	507579	157	507628	198	507669
35	507407	76	507454	117	507580	158	507629	199	507670
36	507408	77	507455	118	507581	159	507630	200	507671
37	507409	78	507456	119	507582	160	507631	201	507672
38	507410	79	507457	120	507583	161	507632	202	507673
39	507411	80	507458	121	507584	162	507633	203	507675
40	507412	81	507485	122	507585	163	507634	204	507676
41	507413	82	507486	123	507586	164	507635	205	507677

Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

206	507678	247	507763	288	507816	329	507857	370	507910
207	507679	248	507765	289	507817	330	507858	371	507911
208	507680	249	507766	290	507818	331	507859	372	507916
209	507681	250	507768	291	507819	332	507860	373	507917
210	507682	251	507769	292	507820	333	507861	374	507918
211	507683	252	507770	293	507821	334	507862	375	507919
212	507684	253	507771	294	507822	335	507863	376	507920
213	507685	254	507772	295	507823	336	507864	377	507921
214	507686	255	507773	296	507824	337	507865	378	507922
215	507687	256	507774	297	507825	338	507866	379	507923
216	507688	257	507775	298	507826	339	507867	380	507924
217	507689	258	507776	299	507827	340	507868	381	507925
218	507730	259	507777	300	507828	341	507869	382	507926
219	507731	260	507778	301	507829	342	507870	383	507927
220	507732	261	507779	302	507830	343	507881	384	507928
221	507733	262	507780	303	507831	344	507882	385	507929
222	507734	263	507781	304	507832	345	507883	386	507930
223	507735	264	507782	305	507833	346	507884	387	507931
224	507736	265	507793	306	507834	347	507885	388	507932
225	507737	266	507794	307	507835	348	507886	389	507933
226	507738	267	507795	308	507836	349	507887	390	507934
227	507739	268	507796	309	507837	350	507888	391	507935
228	507740	269	507797	310	507838	351	507889	392	507936
229	507741	270	507798	311	507839	352	507890	393	507937
230	507742	271	507799	312	507840	353	507891	394	507938
231	507743	272	507800	313	507841	354	507892	395	507939
232	507744	273	507801	314	507842	355	507893	396	507940
233	507745	274	507802	315	507843	356	507894	397	507941
234	507746	275	507803	316	507844	357	507895	398	507942
235	507747	276	507804	317	507845	358	507896	399	507943
236	507748	277	507805	318	507846	359	507898	400	507944
237	507749	278	507806	319	507847	360	507899	401	507945
238	507750	279	507807	320	507848	361	507901	402	507946
239	507751	280	507808	321	507849	362	507902	403	507947
240	507752	281	507809	322	507850	363	507903	404	507948
241	507753	282	507810	323	507851	364	507904	405	507949
242	507754	283	507811	324	507852	365	507905	406	507950
243	507755	284	507812	325	507853	366	507906	407	507951
244	507758	285	507813	326	507854	367	507907	408	507952
245	507759	286	507814	327	507855	368	507908	409	507953
246	507760	287	507815	328	507856	369	507909	410	507954

Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

411	507955	452	507996	493	508039	534	508098	575	508139
412	507956	453	507997	494	508040	535	508099	576	508140
413	507957	454	507998	495	508041	536	508100	577	508141
414	507958	455	507999	496	508042	537	508101	578	508145
415	507959	456	508000	497	508043	538	508102	579	508146
416	507960	457	508001	498	508044	539	508103	580	508148
417	507961	458	508002	499	508045	540	508104	581	508149
418	507962	459	508003	500	508046	541	508105	582	508150
419	507963	460	508004	501	508047	542	508106	583	508154
420	507964	461	508005	502	508048	543	508107	584	508155
421	507965	462	508006	503	508067	544	508108	585	508157
422	507966	463	508007	504	508068	545	508109	586	508160
423	507967	464	508008	505	508069	546	508110	587	508161
424	507968	465	508009	506	508070	547	508111	588	508162
425	507969	466	508010	507	508071	548	508112	589	508163
426	507970	467	508011	508	508072	549	508113	590	508164
427	507971	468	508012	509	508073	550	508114	591	508165
428	507972	469	508013	510	508074	551	508115	592	508166
429	507973	470	508014	511	508075	552	508116	593	508167
430	507974	471	508016	512	508076	553	508117	594	508168
431	507975	472	508017	513	508077	554	508118	595	508169
432	507976	473	508018	514	508078	555	508119	596	508170
433	507977	474	508019	515	508079	556	508120	597	508171
434	507978	475	508020	516	508080	557	508121	598	508172
435	507979	476	508022	517	508081	558	508122	599	508173
436	507980	477	508023	518	508082	559	508123	600	508174
437	507981	478	508024	519	508083	560	508124	601	508175
438	507982	479	508025	520	508084	561	508125	602	508176
439	507983	480	508026	521	508085	562	508126	603	508177
440	507984	481	508027	522	508086	563	508127	604	508178
441	507985	482	508028	523	508087	564	508128	605	508179
442	507986	483	508029	524	508088	565	508129	606	508180
443	507987	484	508030	525	508089	566	508130	607	508181
444	507988	485	508031	526	508090	567	508131	608	508182
445	507989	486	508032	527	508091	568	508132	609	508183
446	507990	487	508033	528	508092	569	508133	610	508184
447	507991	488	508034	529	508093	570	508134	611	508185
448	507992	489	508035	530	508094	571	508135	612	508186
449	507993	490	508036	531	508095	572	508136	613	508187
450	507994	491	508037	532	508096	573	508137	614	508188
451	507995	492	508038	533	508097	574	508138	615	508189



Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

616	508190	657	508244	698	508291	739	508335	780	508396
617	508191	658	508245	699	508292	740	508336	781	508397
618	508192	659	508246	700	508293	741	508337	782	508398
619	508193	660	508247	701	508294	742	508338	783	508399
620	508194	661	508248	702	508295	743	508339	784	508400
621	508195	662	508249	703	508296	744	508340	785	508401
622	508196	663	508250	704	508297	745	508341	786	508402
623	508197	664	508251	705	508298	746	508342	787	508403
624	508198	665	508252	706	508299	747	508343	788	508404
625	508199	666	508253	707	508300	748	508344	789	508405
626	508200	667	508254	708	508301	749	508345	790	508406
627	508201	668	508255	709	508302	750	508346	791	508407
628	508202	669	508256	710	508303	751	508347	792	508408
629	508203	670	508257	711	508304	752	508348	793	508409
630	508204	671	508258	712	508305	753	508364	794	508410
631	508205	672	508259	713	508306	754	508365	795	508411
632	508206	673	508260	714	508307	755	508366	796	508412
633	508207	674	508265	715	508308	756	508367	797	508413
634	508208	675	508266	716	508309	757	508368	798	508415
635	508209	676	508269	717	508310	758	508369	799	508416
636	508210	677	508270	718	508311	759	508370	800	508417
637	508211	678	508271	719	508312	760	508371	801	508418
638	508213	679	508272	720	508313	761	508372	802	508419
639	508214	680	508273	721	508314	762	508373	803	508420
640	508215	681	508274	722	508315	763	508374	804	508421
641	508216	682	508275	723	508316	764	508375	805	508422
642	508217	683	508276	724	508317	765	508376	806	508423
643	508218	684	508277	725	508318	766	508377	807	508424
644	508219	685	508278	726	508321	767	508378	808	508425
645	508221	686	508279	727	508322	768	508379	809	508426
646	508222	687	508280	728	508323	769	508380	810	508427
647	508233	688	508281	729	508325	770	508381	811	508428
648	508234	689	508282	730	508326	771	508382	812	508429
649	508235	690	508283	731	508327	772	508383	813	508430
650	508236	691	508284	732	508328	773	508384	814	508431
651	508237	692	508285	733	508329	774	508385	815	508432
652	508238	693	508286	734	508330	775	508386	816	508433
653	508239	694	508287	735	508331	776	508387	817	508434
654	508240	695	508288	736	508332	777	508393	818	508435
655	508242	696	508289	737	508333	778	508394	819	508436
656	508243	697	508290	738	508334	779	508395	820	508437

Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

821	508438	862	508479	903	508525	944	508570	985	508615
822	508439	863	508480	904	508526	945	508571	986	508616
823	508440	864	508481	905	508527	946	508572	987	508617
824	508441	865	508482	906	508529	947	508573	988	508618
825	508442	866	508483	907	508530	948	508574	989	508619
826	508443	867	508484	908	508531	949	508575	990	508620
827	508444	868	508485	909	508532	950	508576	991	508621
828	508445	869	508486	910	508533	951	508577	992	508622
829	508446	870	508487	911	508534	952	508578	993	508623
830	508447	871	508488	912	508535	953	508579	994	508624
831	508448	872	508489	913	508536	954	508581	995	508625
832	508449	873	508490	914	508537	955	508583	996	508626
833	508450	874	508491	915	508538	956	508584	997	508627
834	508451	875	508492	916	508539	957	508586	998	508628
835	508452	876	508493	917	508540	958	508587	999	508629
836	508453	877	508495	918	508541	959	508588	1000	508635
837	508454	878	508496	919	508542	960	508589	1001	508636
838	508455	879	508497	920	508543	961	508590	1002	508637
839	508456	880	508499	921	508544	962	508591	1003	508638
840	508457	881	508500	922	508545	963	508592	1004	508639
841	508458	882	508501	923	508546	964	508593	1005	508640
842	508459	883	508502	924	508547	965	508594	1006	508641
843	508460	884	508503	925	508548	966	508595	1007	508642
844	508461	885	508504	926	508549	967	508596	1008	508643
845	508462	886	508505	927	508550	968	508597	1009	508644
846	508463	887	508506	928	508551	969	508598	1010	508645
847	508464	888	508507	929	508552	970	508599	1011	508646
848	508465	889	508508	930	508553	971	508600	1012	508648
849	508466	890	508510	931	508554	972	508601	1013	508649
850	508467	891	508511	932	508555	973	508602	1014	508650
851	508468	892	508512	933	508556	974	508603	1015	508651
852	508469	893	508515	934	508557	975	508605	1016	508652
853	508470	894	508516	935	508558	976	508606	1017	508653
854	508471	895	508517	936	508559	977	508607	1018	508654
855	508472	896	508518	937	508560	978	508608	1019	508655
856	508473	897	508519	938	508561	979	508609	1020	508656
857	508474	898	508520	939	508562	980	508610	1021	508657
858	508475	899	508521	940	508563	981	508611	1022	508658
859	508476	900	508522	941	508564	982	508612	1023	508659
860	508477	901	508523	942	508565	983	508613	1024	508660
861	508478	902	508524	943	508569	984	508614	1025	508661

Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

1026	508663	1067	508708	1108	508749	1149	508790	1190	508835
1027	508666	1068	508709	1109	508750	1150	508791	1191	508836
1028	508667	1069	508710	1110	508751	1151	508792	1192	508837
1029	508668	1070	508711	1111	508752	1152	508793	1193	508838
1030	508669	1071	508712	1112	508753	1153	508794	1194	508839
1031	508670	1072	508713	1113	508754	1154	508795	1195	508840
1032	508671	1073	508714	1114	508755	1155	508796	1196	508841
1033	508672	1074	508715	1115	508756	1156	508797	1197	508842
1034	508673	1075	508716	1116	508757	1157	508798	1198	508843
1035	508674	1076	508717	1117	508758	1158	508799	1199	508844
1036	508675	1077	508718	1118	508759	1159	508800	1200	508845
1037	508676	1078	508719	1119	508760	1160	508801	1201	508846
1038	508677	1079	508720	1120	508761	1161	508802	1202	508847
1039	508678	1080	508721	1121	508762	1162	508803	1203	508848
1040	508679	1081	508722	1122	508763	1163	508804	1204	508849
1041	508680	1082	508723	1123	508764	1164	508805	1205	508850
1042	508681	1083	508724	1124	508765	1165	508807	1206	508851
1043	508682	1084	508725	1125	508766	1166	508808	1207	508855
1044	508683	1085	508726	1126	508767	1167	508809	1208	508871
1045	508684	1086	508727	1127	508768	1168	508812	1209	508902
1046	508685	1087	508728	1128	508769	1169	508813	1210	508903
1047	508686	1088	508729	1129	508770	1170	508814	1211	508904
1048	508687	1089	508730	1130	508771	1171	508815	1212	508905
1049	508688	1090	508731	1131	508772	1172	508817	1213	508906
1050	508689	1091	508732	1132	508773	1173	508818	1214	508907
1051	508692	1092	508733	1133	508774	1174	508819	1215	508908
1052	508693	1093	508734	1134	508775	1175	508820	1216	508909
1053	508694	1094	508735	1135	508776	1176	508821	1217	508910
1054	508695	1095	508736	1136	508777	1177	508822	1218	508911
1055	508696	1096	508737	1137	508778	1178	508823	1219	508912
1056	508697	1097	508738	1138	508779	1179	508824	1220	508913
1057	508698	1098	508739	1139	508780	1180	508825	1221	508914
1058	508699	1099	508740	1140	508781	1181	508826	1222	508915
1059	508700	1100	508741	1141	508782	1182	508827	1223	508916
1060	508701	1101	508742	1142	508783	1183	508828	1224	508917
1061	508702	1102	508743	1143	508784	1184	508829	1225	508918
1062	508703	1103	508744	1144	508785	1185	508830	1226	508919
1063	508704	1104	508745	1145	508786	1186	508831	1227	508920
1064	508705	1105	508746	1146	508787	1187	508832	1228	508921
1065	508706	1106	508747	1147	508788	1188	508833	1229	508922
1066	508707	1107	508748	1148	508789	1189	508834	1230	508923

Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

1231	508924	1272	508975	1313	509016	1354	509107	1395	509171
1232	508925	1273	508976	1314	509017	1355	509108	1396	509172
1233	508926	1274	508977	1315	509018	1356	509109	1397	509173
1234	508927	1275	508978	1316	509019	1357	509118	1398	509174
1235	508928	1276	508979	1317	509020	1358	509119	1399	509175
1236	508929	1277	508980	1318	509021	1359	509122	1400	509176
1237	508930	1278	508981	1319	509022	1360	509123	1401	509177
1238	508931	1279	508982	1320	509023	1361	509124	1402	509178
1239	508932	1280	508983	1321	509024	1362	509125	1403	509179
1240	508933	1281	508984	1322	509025	1363	509126	1404	509180
1241	508934	1282	508985	1323	509026	1364	509127	1405	509181
1242	508935	1283	508986	1324	509027	1365	509128	1406	509182
1243	508936	1284	508987	1325	509028	1366	509129	1407	509183
1244	508937	1285	508988	1326	509029	1367	509137	1408	509184
1245	508938	1286	508989	1327	509030	1368	509138	1409	509185
1246	508939	1287	508990	1328	509031	1369	509139	1410	509186
1247	508940	1288	508991	1329	509032	1370	509140	1411	509187
1248	508941	1289	508992	1330	509033	1371	509141	1412	509189
1249	508942	1290	508993	1331	509034	1372	509142	1413	509190
1250	508943	1291	508994	1332	509035	1373	509143	1414	509191
1251	508944	1292	508995	1333	509042	1374	509144	1415	509192
1252	508945	1293	508996	1334	509043	1375	509145	1416	509194
1253	508946	1294	508997	1335	509044	1376	509146	1417	509195
1254	508947	1295	508998	1336	509080	1377	509147	1418	509196
1255	508948	1296	508999	1337	509090	1378	509148	1419	509197
1256	508949	1297	509000	1338	509091	1379	509149	1420	509198
1257	508950	1298	509001	1339	509092	1380	509156	1421	509199
1258	508951	1299	509002	1340	509093	1381	509157	1422	509200
1259	508952	1300	509003	1341	509094	1382	509158	1423	509201
1260	508953	1301	509004	1342	509095	1383	509159	1424	509202
1261	508954	1302	509005	1343	509096	1384	509160	1425	509203
1262	508955	1303	509006	1344	509097	1385	509161	1426	509204
1263	508956	1304	509007	1345	509098	1386	509162	1427	509205
1264	508957	1305	509008	1346	509099	1387	509163	1428	509206
1265	508958	1306	509009	1347	509100	1388	509164	1429	509207
1266	508969	1307	509010	1348	509101	1389	509165	1430	509208
1267	508970	1308	509011	1349	509102	1390	509166	1431	509209
1268	508971	1309	509012	1350	509103	1391	509167	1432	509212
1269	508972	1310	509013	1351	509104	1392	509168	1433	509215
1270	508973	1311	509014	1352	509105	1393	509169	1434	509216
1271	508974	1312	509015	1353	509106	1394	509170	1435	509217

Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

1436	509218	1477	509281	1518	509324	1559	509393	1600	509436
1437	509219	1478	509282	1519	509325	1560	509394	1601	509437
1438	509220	1479	509283	1520	509327	1561	509395	1602	509438
1439	509221	1480	509284	1521	509328	1562	509396	1603	509439
1440	509222	1481	509285	1522	509329	1563	509397	1604	509440
1441	509223	1482	509286	1523	509330	1564	509398	1605	509441
1442	509224	1483	509287	1524	509331	1565	509399	1606	509443
1443	509225	1484	509288	1525	509337	1566	509400	1607	509445
1444	509226	1485	509289	1526	509338	1567	509401	1608	509446
1445	509227	1486	509290	1527	509339	1568	509402	1609	509449
1446	509233	1487	509291	1528	509340	1569	509403	1610	509450
1447	509234	1488	509292	1529	509341	1570	509404	1611	509451
1448	509237	1489	509293	1530	509342	1571	509405	1612	509452
1449	509238	1490	509294	1531	509343	1572	509406	1613	509453
1450	509241	1491	509295	1532	509344	1573	509407	1614	509454
1451	509242	1492	509296	1533	509345	1574	509408	1615	509455
1452	509246	1493	509297	1534	509346	1575	509409	1616	509456
1453	509247	1494	509298	1535	509347	1576	509410	1617	509457
1454	509249	1495	509299	1536	509348	1577	509411	1618	509458
1455	509250	1496	509300	1537	509349	1578	509412	1619	509460
1456	509260	1497	509301	1538	509350	1579	509413	1620	509461
1457	509261	1498	509302	1539	509351	1580	509414	1621	509462
1458	509262	1499	509303	1540	509352	1581	509415	1622	509463
1459	509263	1500	509304	1541	509353	1582	509416	1623	509464
1460	509264	1501	509305	1542	509354	1583	509417	1624	509465
1461	509265	1502	509306	1543	509355	1584	509418	1625	509466
1462	509266	1503	509307	1544	509356	1585	509419	1626	509467
1463	509267	1504	509308	1545	509357	1586	509420	1627	509468
1464	509268	1505	509309	1546	509358	1587	509421	1628	509469
1465	509269	1506	509310	1547	509359	1588	509422	1629	509470
1466	509270	1507	509311	1548	509360	1589	509423	1630	509471
1467	509271	1508	509313	1549	509363	1590	509424	1631	509472
1468	509272	1509	509314	1550	509365	1591	509425	1632	509473
1469	509273	1510	509315	1551	509366	1592	509426	1633	509474
1470	509274	1511	509316	1552	509368	1593	509427	1634	509475
1471	509275	1512	509317	1553	509370	1594	509428	1635	509476
1472	509276	1513	509318	1554	509373	1595	509429	1636	509477
1473	509277	1514	509319	1555	509374	1596	509430	1637	509478
1474	509278	1515	509320	1556	509378	1597	509433	1638	509479
1475	509279	1516	509322	1557	509391	1598	509434	1639	509480
1476	509280	1517	509323	1558	509392	1599	509435	1640	509481

Table 1  
AFFECTED SERIAL NUMBER LIST - 5934 ALTIMETERS

1641	509482	1682	509566	1723	509620	1764	509686
1642	509483	1683	509567	1724	509621	1765	509687
1643	509484	1684	509568	1725	509622	1766	509688
1644	509486	1685	509569	1726	509627	1767	509689
1645	509487	1686	509570	1727	509628	1768	509690
1646	509488	1687	509571	1728	509631	1769	509691
1647	509489	1688	509572	1729	509633	1770	509699
1648	509490	1689	509573	1730	509634	1771	509701
1649	509491	1690	509574	1731	509635	1772	509702
1650	509492	1691	509575	1732	509637	1773	509703
1651	509493	1692	509576	1733	509638	1774	509704
1652	509495	1693	509577	1734	509639	1775	509705
1653	509496	1694	509578	1735	509640	1776	509706
1654	509497	1695	509579	1736	509641	1777	509707
1655	509498	1696	509580	1737	509642	1778	509708
1656	509499	1697	509581	1738	509657	1779	509742
1657	509500	1698	509582	1739	509658	1780	509743
1658	509501	1699	509583	1740	509660	1781	509824
1659	509502	1700	509584	1741	509661	1782	509825
1660	509503	1701	509585	1742	509663	1783	509826
1661	509504	1702	509586	1743	509664	1784	509827
1662	509505	1703	509587	1744	509665	1785	509828
1663	509506	1704	509588	1745	509666	1786	509829
1664	509507	1705	509589	1746	509667	1787	509830
1665	509508	1706	509590	1747	509668	1788	509831
1666	509509	1707	509591	1748	509669	1789	509832
1667	509510	1708	509592	1749	509670	1790	509861
1668	509511	1709	509593	1750	509671	1791	509862
1669	509512	1710	509594	1751	509672	1792	509863
1670	509513	1711	509595	1752	509673	1793	509864
1671	509514	1712	509596	1753	509674	1794	509952
1672	509554	1713	509597	1754	509675	1795	510092
1673	509555	1714	509598	1755	509677		
1674	509556	1715	509599	1756	509678		
1675	509557	1716	509600	1757	509679		
1676	509558	1717	509601	1758	509680		
1677	509560	1718	509602	1759	509681		
1678	509561	1719	509606	1760	509682		
1679	509562	1720	509611	1761	509683		
1680	509564	1721	509614	1762	509684		
1681	509565	1722	509619	1763	509685		

[Federal Register Volume 82, Number 41 (Friday, March 3, 2017)]

[Rules and Regulations]

[Pages 12395-12397]

From the Federal Register Online via the Government Publishing Office [www.gpo.gov]

[FR Doc No: 2017-03488]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2016-9345; Directorate Identifier 2016-CE-028-AD; Amendment 39-18801; AD 2017-04-06]**

**RIN 2120-AA64**

#### **Airworthiness Directives; United Instruments, Inc. Series Altimeters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

---

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain United Instruments, Inc. 5934 series altimeters that were manufactured between January 2015 and February 2016 and installed in airplanes and helicopters. This AD was prompted by reports of certain altimeters displaying higher than actual altitude due to a slow diaphragm leak, which would affect the accuracy of the altimeters. This AD requires replacing the affected altimeters. We are issuing this AD to correct the unsafe condition on these products.

**DATES:** This AD is effective April 7, 2017.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of April 7, 2017.

**ADDRESSES:** For service information identified in this final rule, contact United Instruments, Inc., 3625 Comotara Avenue, Wichita, KS 67226; telephone (316) 636-9203; fax: (316) 636-9243; email: customerservice@unitedinst.com; Internet: www.unitedinst.com or <http://www.unitedinst.com/Products/SpecificationsSheets/d132811.aspx>. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9345.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9345; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD,

the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: (800) 647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Les Lyne, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4190; fax: (316) 946-4107; email: leslie.lyne@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain United Instruments, Inc. 5934 series altimeters that were manufactured between January 2015 and February 2016 and installed in airplanes and helicopters. The NPRM published in the Federal Register on November 7, 2016 (81 FR 78083). The NPRM was prompted by a report that certain 5934 series altimeters that were manufactured between January 2015 and February 2016 may display higher than actual altitude. These altimeters are susceptible to developing a slow diaphragm leak, which would affect the accuracy of the altimeters. It has been determined that insufficient removal of chemical substance on the diaphragm assembly during the production process of the altimeter caused the misleading display of altitude data. The NPRM proposed to require replacing the affected altimeters. We are issuing this AD to prevent display of misleading altitude data, which could result in inadvertent flight into terrain.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

### **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

### **Related Service Information Under 1 CFR Part 51**

We reviewed United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016. The service bulletin describes procedures for replacing the nonconforming altimeters. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Costs of Compliance**

We estimate that this AD affects 1,351 altimeters as installed in airplanes and helicopters of U.S. registry.

We estimate the following costs to comply with this AD:



### Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replace altimeter	1 work-hour × \$85 per hour = \$85	\$1,600	\$1,685	\$2,276,435

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

### Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):



---

**2017-04-06 United Instruments, Inc.:** Amendment 39-18801; Docket No. FAA-2016-9345; Directorate Identifier 2016-CE-028-AD.

**(a) Effective Date**

This AD is effective April 7, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to United Instruments, Inc. 5934 series altimeters that were manufactured between January 2015 and February 2016 and installed in airplanes and helicopters.

(1) The specific affected serial number altimeters can be found in United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016. Paragraph (j)(3) of this AD contains addresses for obtaining the service bulletin.

(2) Altimeters that have been corrected by United Instruments, Inc. following Service Bulletin No. 13, dated March 25, 2016, are not affected by this AD and no further action is necessary.

(3) Altimeters that have been corrected by United Instruments, Inc. can be identified by a yellow dot, approximately 1/4 inch (6 mm) in diameter, located approximately 1 inch (25 mm) to the left side of the nameplate. The corrected altimeters will also have a letter "M," approximately 1/8 inch (3mm) high, metal stamped on the nameplate after the name "ALTIMETER."

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 44, Cabin Systems.

**(e) Unsafe Condition**

This AD was prompted by reports of certain altimeters displaying higher than actual altitude due to a slow diaphragm leak. We are issuing this AD to prevent display of misleading altitude data, which could result in inadvertent flight into terrain.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Replacement**

Within the next 12 months after April 7, 2017 (the effective date of this AD), replace any affected altimeter with a serviceable part following United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016.

## **(h) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (i) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

## **(i) Related Information**

For more information about this AD, contact Les Lyne, Aerospace Engineer, FAA, Wichita ACO, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4190; fax: (316) 946-4107; email: leslie.lyne@faa.gov.

## **(j) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016.

(ii) Reserved.

(3) For United Instruments, Inc. service information identified in this AD, contact United Instruments, Inc., 3625 Comotara Avenue, Wichita, KS 67226; telephone (316) 636-9203; fax: (316) 636-9243; email: customerservice@unitedinst.com; Internet: www.unitedinst.com or <http://www.unitedinst.com/Products/SpecificationsSheets/d132811.aspx>.

(4) You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9345.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri, on February 6, 2017.

Kelly A. Broadway,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.