

## I. DISCUSSION (9-4-20)

Current procedures relative to the recording of maintenance squawks (write-ups) has been a long-time ongoing source of confusion and frustration resulting in the unnecessary grounding of club aircraft. There has been a misunderstood requirement for the grounding of aircraft. The most significant misunderstanding is the belief that once a squawk has been written up, the aircraft becomes unairworthy and therefore must be grounded. For Part 91 operations, this is not necessarily true. There is no verbiage in Parts 43 or 91 that include this requirement. Note that it is a requirement for part 135 operations, and possibly 141 ops. If an MEL exists, it is also a requirement if the discrepancy cannot be deferred. (This is where some of the confusion may have originated from).

SO WHAT MAKES AN AIRCRAFT “UNAIRWORTHY”?? The short and simple answer to this is--- when it no longer conforms to the specifications of the type data certificate, or when it becomes unsafe. The type data certificate is an FAA issued document that's issued to the manufacturer of an aircraft that specifies the aircraft's limitations, performance, and equipment and instruments required for an airplane to be manufactured, maintained, and operated, and, to be issued an Airworthiness certificate. It also specified the FAR part under which the aircraft was certificated.

SO WHAT DISCREPANCIES (SQUAWKS) WILL GROUND AN AIRCRAFT? Short answers:  
Any discrepancy in which an item is required by:

- (1) The VFR-Day type certificate for instruments and equipment ; [91.213(d)(2)(i)]
- (2) Required by aircraft's Equipment List, OR “Kinds of Equipment List” for the flight operations being conducted; [91.213(d)(2)(ii)]
- (3) Required by AD [91.213(d)(2)(iv)]
- (4) Any discrepancy that makes it unsafe to fly; [91.213(d)(4)]

WHAT DISCREPANCIES (SQUAWKS) WILL LIMIT THE OPERATION OF AN AIRCRAFT?

Any discrepancy in which an item is required by:

- (1 ) The aircraft's “Kinds of Equipment List” for the flight operations being conducted; [91.213(d)(2)(ii)]
- (2) FAR for the flight being conducted. Specifically: [91.213(d)(2)(iii)]
  - (a) Instrument & Equipment Requirements for VFR-day, VFR-night, IFR, (21.205)
  - (b) ELT (91.207)
  - (c) Lights (91.209)
  - (d) Transponder requirements (91.215) (91.217)
  - (e) ADS-B (out (91.225)

WHAT ACTION IS REQUIRED WHEN A DISCREPANCY (SQUAWK) IS DISCOVERED?

The item must be removed or deactivated, placarded “INOP”, and an entry must be made in a maintenance record. Again, there is no requirement to ground the airplane based on the existence of a maintenance entry. The airplane must only be grounded when it does not meet the specifications of the type data certificate, is unsafe, or if the item is required by FAR.

## II MAINTENANCE DISCREPANCIES (SQUAWKS) POLICY & PROCEDURES (9-4-20)

### A. GROUNDING AIRCRAFT

1. Pilots may ground an aircraft ONLY under one of the following circumstances.
  - a. Aircraft is not operational. Examples--flat tire, dead battery, inop alternator, engine won't start;
  - b. Aircraft is unsafe. Examples--fuel leak, smoke, rough engine, dead/bad mag, flight control issues;
  - c. Structural damage- Examples--crack in windshield, prop damage, new large dents;
  - d. The "Inoperative Items Reference Table" indicates the aircraft is to be grounded.
  - e. The aircraft's "Kinds Of Equipment List" indicates its required for ALL flights.
2. For all other issues, only JimC, JimG, the aircraft owner, or an A&P can ground the aircraft.
3. In the event of an aircraft being grounded, JimG or JimC to be notified immediately. Do not write up a squawk without talking with one of us.

### B. MX WRITEUPS

1. There are two squawk sheets. One for instances where the aircraft should be grounded labeled "Airworthiness Squawks".. The other labeled "Deferrable Squawks" formerly labeled and referred to as "Nuisance Squawks". Pilots are to complete the appropriate sheet, and inform Dispatch if it is open.
2. \*Airworthiness Squawks --- To be used when grounding the aircraft only. See the "Inoperative Items Reference Table" Jim G or JimC should be consulted before writing up an airworthiness squawk.
3. Deferrable Squawks --- To be used for all other squawks to include:
  - a. Cosmetic issues--- Examples---torn or dirty seats,
  - b. Minor operational issues--Examples---missing screws, broken latches, bald or flat spots on tires,
  - c. \*Avionics issues that do not make the unit inoperative---Examples--- missing knobs, inop PTT switches, bad displays, expired databases, scratchy / intermittent radios,
  - d. \*Inoperative items that may affect the type of operations that can be flown. See the "Inoperative Items Reference Table." Dispatch as well as JimG or JimC to be notified.
4. Dispatch Responsibilities-
  - a. Record the squawks on the Aircraft Status Report for those items listed above marked with a "\*".
  - b. Notify the owner and Jim G or JimC for those items listed above marked with a "\*".
5. Disposition of Squawks
  - a. Airworthiness Squawks need to be signed off by an A&P once resolved and the airplane returned to service. Note: JimG or JimC may sign off the squawk in the event they determine that it is not an airworthiness issue, or if the squawk was a result of pilot error.
  - b. There is no requirement for the deferrable (nuisance) squawks to be signed off. Typically they can be resolved the next time the plane is in for maintenance.

### C. ADDITIONAL STEPS

1. Some "INOP" stickers will be placed in the dispatch books that pilots can use if needed.
2. In order to deactivate an intel, usually simply turning it off or pulling its CB will be sufficient. In most cases, if it's not working, it's already deactivated.
3. The two OFC squawk sheets constitute the maintenance records required by the FAR (even though they are also OFC generated internal documents).

## INOPERATIVE ITEMS REFERENCE TABLE (9-4-20)

This table is to be used when determining the type of squawk. Note that an aircraft's limitations, Equipment List or Kinds of Equipment List takes precedence.

**A=** Airworthiness Squawk- Aircraft to be Grounded; **D=** Deferrable Squawk (nuisance squawks)

CATEGORY & ITEMS	A/N	OPS LIMITS /REMARKS
<b>FLIGHT INSTRUMENTS-Analog</b> Airspeed Indicator Altimeter Annunciators (if installed) Artificial Horizon/ Attitude Indicator Clock Directional Gyro/ Heading Indicator (DG) Fuel Qty Magnetic Compass OutsideAir Temperature (OAT) PFD Backup instruments (analog) Suction Gauge Turn Coordinator Vertical Speed (VSI) Other	A A D D D A A D D D D D D D	Unless required by POH/ STC limitations VFR FLIGHT ONLY VFR FLIGHT ONLY VFR FLIGHT ONLY IF INOP. Does not have to be accurate. Unless required by POH or STC for IFR flight VFR FLIGHT ONLY
<b>FLIGHT INSTRUMENTS-Digital</b> Primary Flight Display (PFD) Backup PFD	A* D**	* Unless backup instruments duplicating required functions are available. DAY VFR only. ** IF required by POH/STC = A.
<b>ENGINE INSTRUMENTS</b> RPM (Tachometer) Gauge RPM Tach--hour meter MP (if installed) Oil Pressure Oil Temp Fuel Flow EGT CHT Other Hobbs Meter Other	A D A A A D D D D D D D	NOTE & RECORD HOBBS Record Tach time.
<b>AVIONICS</b> ADS-B- Out Audio Panel or Switches Comm Radio ELT & ELT Battery(s) External Speaker Glide Slope GPS GPS -Nav Database Handled Mic (inop or missing) Intercom Jacks (Mic/Headphone) NAV / VOR Receiver Nav Indicator (VOR/LOC/GPS) Transponder Transponder Mode C Other	A D	Unless authorized by ATC Unless NAV/COM functionality is inop One Comm radio must be operational. If not=A. Approved for instructional (dual) flight only within 50nm of OAK. Otherwise=A Unless headphones do not function. IFR flight using ILS/LVP prohibited IFR flight using GPS navigation prohibited IFR flight using GPS navigation prohibited Provided two-way radio communications can be maintained. VFR ONLY- Unless the aircraft has 2 units installed and operational. VFR ONLY -Unless the aircraft has 2 units installed and operational Unless authorised by ATC Unless authorized by ATC
<b>EQUIPMENT / SYSTEMS -Misc</b> Carb Heat Environmental Electric Fuel Pump Fuses (if applicable) Landing Gear Indicator/Warning (if retractable) Pitot Heat Pitot Static System Vacuum System / Gauge Other	A D A D A D A A A D	DAY VFR ONLY Unless required by POH or operating in icing conditions Unless the alternate static source (if installed) resolved the issue. Then=N Unless instruments and equipment utilizing vacuum / suction are confirmed operational.
<b>LIGHTS</b> Anti-collision Light System / Rotating Beacon Interior-Panel Light(s) Interior- Flood Light / Dome Light Landing Light Position / Nav lights Rotating (or flashing) Beacon Taxi Light Other Lights	A D D D D D D D	NOTE: Required operational for all flights per 91.205b DAY FLIGHT ONLY IF FOR HIRE DAY FLIGHT ONLY NOTE: These are part of the anti-collision light system..

# OAKLAND FLYERS DEFERRABLE SQUAWKS (9-4-20)

N \_\_\_\_\_

**INSTRUCTIONS:** (1) One squawk per entry;

(2) OPS LIMITATIONS-Enter only if applicable per the Inoperative Items Reference Table.

Possible options are: "VFR ONLY", "DAY-VFR ONLY" "DAY ONLY", OTHER (specify)

DATE	PILOT'S NAME & CELL NUMBER (printed)	CFI	OPS LIMITATIONS (If applicable. See instructions)
DESCRIPTION OF SQUAWK (describe in as much detail as needed to assist in troubleshooting the issue)			
RESOLUTION & ENDORSEMENT (if applicable)			

DATE	PILOT'S NAME & CELL NUMBER (printed)	CFI	OPS LIMITATIONS (If applicable. See instructions)
DESCRIPTION OF SQUAWK (describe in as much detail as needed to assist in troubleshooting the issue)			
RESOLUTION & ENDORSEMENT (if applicable)			

DATE	PILOT'S NAME & CELL NUMBER (printed)	CFI	OPS LIMITATIONS (If applicable. See instructions)
DESCRIPTION OF SQUAWK (describe in as much detail as needed to assist in troubleshooting the issue)			
RESOLUTION & ENDORSEMENT (if applicable)			

DATE	PILOT'S NAME & CELL NUMBER (printed)	CFI	OPS LIMITATIONS (If applicable. See instructions)
DESCRIPTION OF SQUAWK (describe in as much detail as needed to assist in troubleshooting the issue)			
RESOLUTION & ENDORSEMENT (if applicable)			

# OAKLAND FLYERS AIRWORTHINESS SQUAWKS (9-4-20)

N \_\_\_\_\_

**INSTRUCTIONS:** (1) Contact Jim G or Jim C for authorization prior to making entry if possible. Otherwise notify. (2) Aircraft is Grounded.

DATE	PILOT'S NAME & CELL NUMBER (printed)	CFI
DESCRIPTION OF SQUAWK (describe in as much detail as needed to assist in troubleshooting the issue) ( One squawk per entry)		
RESOLUTION & ENDORSEMENT		

DATE	PILOT'S NAME & CELL NUMBER (printed)	CFI
DESCRIPTION OF SQUAWK (describe in as much detail as needed to assist in troubleshooting the issue) ( One squawk per entry)		
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