

# kontakt med



MEDLEMSTIDNING FÖR LINKÖPINGS FLYGKLUBB

Redaktion: Per-Olov Jonsson A 013-115610 H 013-104358  
Kjell Pettersson A 013-113380 H 013-139935  
Distribution: Klas Forsman Mats Jonsson  
Adressregister: Gun Lundqvist expedition

**NR 1 1989**

## I DETTA NR

### STYRELSEN HAR ORDET.

- \* Kallelse till årsmöte.
- \* Till minnet av Mats och Lennart.
- \* Förändring av deponerar kapital.
- \* Medlemsavgifter 1989.
- \* Grattis!
- \* Nya medlemmar.

### JOHANNES HAR ORDET.

### TEKNISKA TJÄNSTEN.

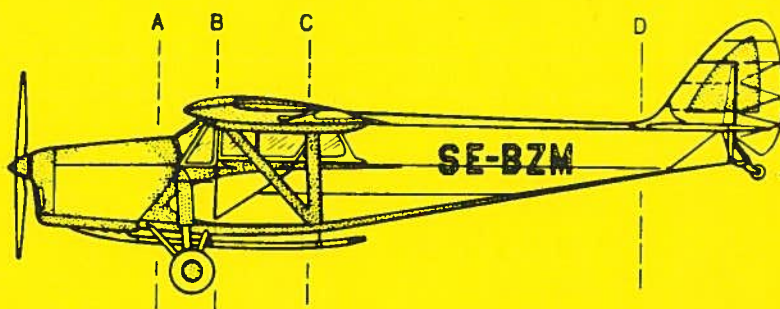
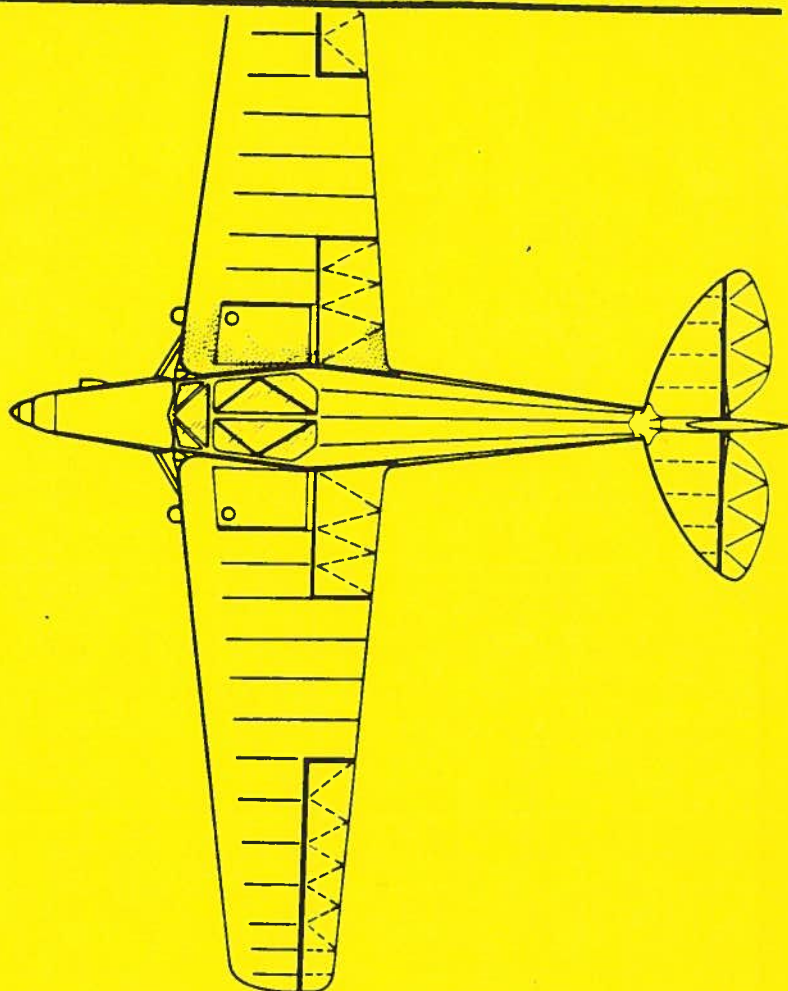
- \* Utmagring av motorer.

### JOURTJÄNSTEN.

### TÄVLINGSVERKSAMHETEN.

- \* Tävla och umgås.
- \* Tävlingskalendern 1989.
- \* Resultat Nattugglan.

### NÄSTA KONTAKT.



ÖD 08-797620V

LINKÖPINGS FLYGKLUBB, 581 88 Linköping tel Exp och Jour 013-18 32 00  
flygchef och hanger 013-18 32 01

Postgiro 16 01 43-4 Bankgiro 120-0732  
Expeditionstider: Skol-och flygchef vardagar 08.00 - 09.00  
Expeditionen vardagar 08.00 - 15.00

Bokningstider: Vardagar: Exptid 08.00-15.00 Jourh 17.00-mörkrets inbrott  
Lör-, sön-, och helgdagar: Jourhavande 08.00-mörkrets inbr.

# MEMORANDUM FOR THE RECORD

DATE: 10/15/54

TO: SAC, NEW YORK

FROM: SA [Name], NEW YORK

SUBJECT: [Subject]

RE: [Subject]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

[Text]

## STYRELSEN HAR ORDET

### KALLELSE TILL ÅRSMÖTE 17 MARS 1989 KL. 19.00 I FLYGETS HUS.

Förslag till dagordning:

1. Mötet öppnas.
2. Fråga om mötet är utlyst i laga ordning.
3. Val av ordförande för mötet.
4. Val av justeringsmän att jämte ordförande justera dagens protokoll.
5. Föredragning av klubbstyrelsens årsberättelse och revisorernas berättelse.
6. Fråga om ansvarsfrihet för klubbstyrelsen.
7. Förslag från enskilda medlemmar, vilka skriftligen kommit styrelsen tillhanda senast 8 dagar före årsmötet.
8. Val av klubbstyrelse mm. enligt följande:
  - \* Ordförande.
  - \* 4 ordinarie ledarmot.
  - \* 3 suppleanter.
  - \* 2 revisorer
  - \* 2 revisorsuppleanter
9. Tillsättande av valberedning.
10. Val av representant till KSAK:s årsmöte.
11. Kandidat att uppsättas på förslag till inval i KSAK:s styrelse
12. Övriga frågor.
13. Sammanträdet avslutas.

Under punkten övriga frågor kommer bl.a att redovisas:

- Förändring av deponerat kapital.
- Flygplansparkens nyanskaffning.
- LFK:s omlokalisering.

Efter mötet severas lätt förtäring till självkostnadspris.

## TILL MINNET AV MATS OCH LENNART

Det som inte får hända har hänt. Vid en tragisk olycka alldeles före Julhögtiden med vår Safari omkom två av våra kamrater.

### **MATS LIND OCH LENNART SUNDSTRÖM**

Vi minns dem båda som flygentusiaster och goda kamrater och saknaden har stundtals känts förlamande. Båda bidrog på sitt sätt att bygga upp vår klubb och utveckla verksamheten under den alltför kort tid vi fick ha dem bland oss.

Vi förenar oss med de efterlevande i deras stora sorg.

---

För att manifesteras minnet av de omkomna har styrelsen beslutat att inrätta en fond

### MINNESFONDEN FÖR MATS LIND OCH LENNART SUNDSTRÖM

Syftet med fonden är att stödja arbete för säkerhet i klubbflyget.

LFK bidrar vid starten med ett grundbelopp och dessutom har bidrag inkommit från sörjande i samband med begravningshögtidligheten.

Klubbmedlemmar och övriga kan fortsatt bidra med medel till fonden genom insättning på LFK postgiro med angivande av "Minnesfonden".

Fonden leds av en styrelse som beslutar om medlens användning efter ansökningar och förslag som ställs till fonden via LFK.

---

Liksom de efterlevande måste vi nu blicka framåt och finna vägar att gå vidare.

I detta ingår att ta lärdom av det inträffade. Var och en av oss bör tänka igenom sina flygningar en extra gång ur flygsäkerhetssynpunkt. Dock får vi inte drabbas av flygrädsla. Känner Du någon tveksamhet så använd Dig av de möjligheter klubben ger med goda lärare, kontrollflygare och erfarna kamrater.

---

Ordf

## Förändring av deponerat kapital

Inför förestående byte av flygplanparken behöver LFK förstärka sin likviditet. Det förmånligaste för LFK och i högsta grad också för Dig som medlem är en utökning av det deponerade kapitalet. Fördelen med att Du som medlem deponerar kapital är att Du kan tillgodogöra Dig skatteeffekten av ränteinkomster / utgifter vilket klubben ej har någon möjlighet till.

Styrelsen har fattat följande beslut som gäller från och med den 1:a april 1989:

Endast 6000 sek kan nytecknas

Deponerat kapital	Rabatt flygtimpris
2000 sek	20 sek/h
4000 sek	40 sek/h
6000 sek	60 sek/h

Ovanstående gäller under 1989. Från och med den 1:a januari 1990 ger deponerat kapital på 2000 sek och 4000 sek ingen rabatt längre. Ni har således hela 1989 på er att övergå från 2000 & 4000 sek till 6000 sek vilket vi hoppas att ni alla gör. Ingen uppsägning behövs vid en omteckning till 6000 sek. Förfarandet vid omteckning är detsamma som vid nyteckning. Om någon mot förmodan skulle välja att ta ut sitt tidigare deponerade kapital på 2000 & 4000 sek gäller en uppsägningstid på 2 månader, dvs ej som tidigare 2 månader innan reversdatumet.

Styrelsen

---

### MEDLEMSAVGIFTER 1989.

FÖDELSEÅR	Avg. till KSAK	"G"	"S"
- 1924	200:- (100:-)	200:-	70:-
1925 - 1968	400:- (200:-)	250:-	70:-
1969 - 1973	200:- (90:-)	200:-	70:-
1974 -	40:- (30:-)	40:-	40:-

- Flygande medlemmar ska tillhöra kategori "0" eller "G".
- Ordinarie medlemmar erhåller Flygrevyn.
- Gästmedlemskap förutsätter ordinarie medlemskap i annan till KSAK ansluten klubb eller direktanslutning till KSAK.

## GRATTIS !

LFK ber att få gratulera klubbens stora slitvarg,  
Tommy Bergström som fyllt 50 år.

## NYA MEDLEMMAR

Följande nya medlemmar hälsas välkomna i klubben:

210 Mike Danilovic  
490 Ivar Lundström  
732 Berndt Weimer  
118 Carl Niclas Andersson  
534 Håkan Nilsson-Ranta  
605 Paul Pinato

---

## JOHANNES HAR ORDET

Påminnelser till alla som flyger i LFK !

När det gäller SE-IUD "Guldägget" skall Headseten hänga på avsedda krokarna som finns på solskydden. Ingenting får ligga uppe på panelen.

SE-IFX har nu kommit i tjänst efter reparationen.  
OBS ! SE-IFX har nu Long-rangetankar, alltså samma som SE-IFZ.

Cuben SE-KEG, följ checklistan !  
Transpondern har varit på reparation redan. Detta beror på att man inte har kuperat efter checklistan. Man har kuperat med radio och transponder till. Nästa som har flugit har startat upp utan att kolla om radio och transponder stått i off-läge.  
Följ checklistan så spar vi både pengar och tid.

OBS ! GÄLLER ALLA VÅRA FLYGPLAN.

Flyg väl !

Boka inflygning på SE-IUD !

Boka in din PFT i tid !

Johanness

# TEKNISKA TJÄNSTEN

## UTMAGRING AV MOTORER.

På sista tiden har det diskuterats en hel del om hur utmagring av våra motorer ska gå till. Vår tekniska chef, Lennar Carlsson har med anledning av detta tagit fram vad Lycoming föreskriver. Det bör vara av intresse för alla piloter att läsa denna instruktion.

### 7. OPERATION IN FLIGHT.

A. See airframe manufacturer's instructions for correct manifold pressure for power settings.

B. *Fuel Mixture Leaning Procedure* - Improper fuel-air mixture during flight is responsible for many engine problems, particularly during take-off and climb power settings. The procedures described in this manual provide proper fuel-air mixture when leaning Avco Lycoming engines, they have proven to be both economical and practical by eliminating excessive fuel consumption and reducing damaged parts replacement. It is therefore recommended that operators of all Avco

3-4

## LYCOMING OPERATOR'S MANUAL

0-235 AND 0-290 SERIES

SECTION 3

Lycoming aircraft powerplants utilize the instructions in this publication any time the fuel-air mixture is adjusted during flight.

### LEANING PRECAUTIONS

*Never exceed the maximum red line cylinder head temperature limit.*

*For continuous operation cylinder head temperatures should be maintained below 435°F. (224°C.).*

*On direct drive engines with manual mixture control, maintain mixture control in "Full Rich" position for rated take-off, rated maximum continuous, climb and cruise powers above 75%. However, during take-off from high elevation airport or during climb, roughness or loss of power may result from over-richness. In such a case adjust mixture control only enough to obtain smooth operation - not for economy. Observe instruments for temperature rise. Rough operation due to over-rich fuel-air mixture is most likely to be encountered at altitude above 5,000 feet.*

*Always enrich mixture before increasing power.*

### C. LEANING TO EXHAUST GAS TEMPERATURE GAGE.

(1) *Above 75% power - Never lean beyond 150°F. on rich side of peak EGT unless aircraft operator's manual shows otherwise. Monitor cylinder head temperature.*

(2) *75% power and below - Operate at peak EGT.*

D. LEANING WITH MANUAL MIXTURE CONTROL. (At 75% power or less without flowmeter or EGT gage.)

(1) Slowly move mixture control from "Full Rich" position toward lean position.

(2) Continue leaning until engine roughness is noted.

(3) Enrich until engine runs smoothly and power is regained.

E. ALTERNATE METHOD. (In calm air and engines with fixed pitch propellers.)

(1) Slowly move mixture control toward lean position while closely watching tachometer. Continue leaning until RPM decreases.

(2) At this point enrich until RPM just peaks. Correct fuel-air ratio is obtained at this point.

## LEANING — A REVIEW

The subject of leaning is one which never seems to get enough attention. There are many misunderstandings and misconceptions about the when, why and how of adjusting the fuel/air mixture for operation of Lycoming opposed series aircraft engines. A brief review may be helpful to many Flyer readers.

References which may be used to study information on leaning include the Engine Operator's Manual and Lycoming Service Instruction No. 1094. The following paragraphs are based on these references, but attempt to put the material in a form which will allow easier reading and understanding. **Because each aircraft and engine combination is different, the *Pilot's Operating Handbook* will be the final authority on this subject when it is different from the general information provided in this article.**

Perhaps, it would be appropriate to examine why it is necessary to lean the air-cooled aircraft engine. To keep aircraft weight and drag at the minimum, airframe manufacturers have usually chosen to reduce cooling drag by providing enough cooling air to do a good job in the cruise mode where the aircraft is operated most of the time. When power above the cruise range is used, additional cooling is achieved by increasing the flow of air through open cowl flaps, and the introduction of excess fuel. Leaning the mixture in aircraft engines is also required because of the decrease in air density with an increase in altitude. Mixture strength will increase as the aircraft climbs and must be compensated for by leaning; proper leaning will insure that an appropriately combustible mixture is maintained at all operating altitudes.

With this background regarding why the air-cooled piston aircraft engine must be leaned, let's look at some general recommendations concerning the why of leaning which will apply to all Lycoming piston engines.

1. Most carburetors or fuel injectors are intentionally adjusted to be capable of operation slightly on the rich side — this calls for leaning at any altitude when operating at the manufacturer's recommended cruise power.
2. Proper leaning means economy of fuel, which results in lower cost of operation.
3. Excessively rich running engines cause roughness — proper leaning makes them smooth. Smoothness protects engine mounts and engine accessories from undesirable vibration and possible failure.
4. Leaning at cruise extends the range of the aircraft — a safety factor.
5. Proper leaning means less spark plug fouling and longer life for plugs — also a safety factor, as well as lower maintenance cost.
6. Correct leaning means cleaner combustion chambers and less likelihood of preignition from undesirable combustion deposits.
7. Proper leaning at cruise power results in more normal engine temperatures in cool weather or at the cooler temperatures of altitude. Rich mixtures at cruise power cause undesirable cool engine temperatures. As an example, oil temperature should be a minimum of 165 degrees F in order to reduce moisture forming vapors and acids in the engine oil.

As we continue the discussion of leaning with respect to the type of fuel metering device or type of engine, there is some additional general information to keep in mind. Although leaning is highly recommended, it is possible to damage an engine by excessive leaning at power settings above the manufacturer's recommended cruise power (usually above 75% of rated engine power). Very small aircraft, such as the typical General Aviation trainer, usually are built with limited engine instrumentation. Therefore, the operator must follow certain basic rules for leaning to protect the powerplant and yet operate it efficiently.

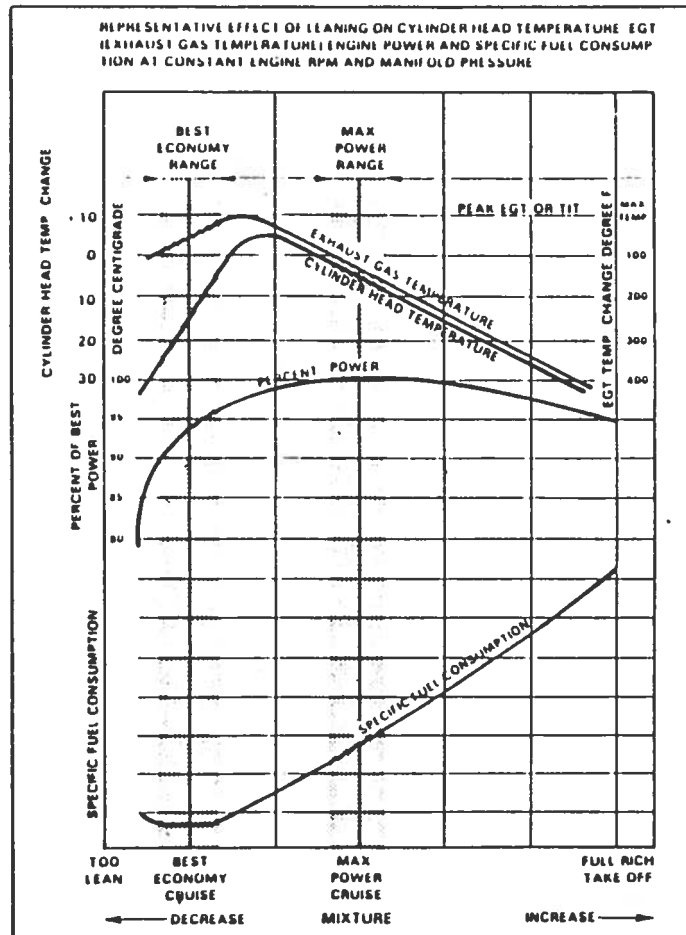
More complex engines with higher horsepower are usually installed in aircraft equipped with adequate engine instrumentation. The airframe manufacturer will establish parameters for safe engine operation which can quickly be determined by reference to instruments which measure fuel flow, exhaust gas temperature, or turbine inlet temperature. These give immediate indications of the effect of leaning. After a period of time for temperatures to stabilize, initial indications may be cross checked against oil temperature and cylinder head temperature. The Pilot's Operating Handbook will list temperature limits for each item.

During this decade of the 1980s, Lycoming engines have been built with one of two fuel metering systems — the float type carburetor or a Bendix fuel injection system. When operating at Manufacturer's Recommended Cruise Power, engines utilizing either of these devices may be leaned.

Engines with a float type carburetor are leaned until engine roughness begins, then the mixture is richened just enough to obtain smooth running. The engine



roughness induced by leaning is a result of imperfect mixture distribution and the leanest cylinder reaching a mixture level which will not support combustion. At the cruise power levels, the roughness incurred briefly during the leaning process is not harmful to the engine. Remember that when carburetor heat is applied it will tend to richen the mixture; this may require the mixture to be adjusted leaner. Because of the wider spread in mixture distribution which is characteristic of the float type carburetor, leaning using the engine roughness method discussed earlier will produce results just as effective as those obtained by using an exhaust gas temperature (EGT) indicator. Should there be an EGT gage in an aircraft with carburetor equipped engine, operation at peak EGT is approved if the engine runs smoothly. A general rule of thumb which many pilots observe is to cruise with mixture set at 50 degrees F on the rich side of peak EGT; this does not achieve best economy as the chart below clearly shows.



When operating an engine with fuel injection at cruise power setting, it is often possible to lean initially by reference to fuel flow. Since fuel injection provides more precise mixture distribution than a carburetor, the EGT is very helpful. After initial leaning by fuel flow, lean to peak EGT and continue to operate at peak. In some cases, it may be preferable to use the general rule of thumb for operation at 50 degrees F on the rich side of peak if this produces smoother engine operation.

With this brief discussion of the minor differences encountered in the leaning of carburetted as opposed to fuel injected engines, it leads to items of consideration when operating different types of Textron Lycoming engines. By type, we refer to normally aspirated or turbocharged. These are recommendations for leaning each one.

1. Textron Lycoming direct drive, normally aspirated engines (carburetted or fuel injected).
  - a. May be leaned at any altitude, at manufacturer's recommended *cruise power* (usually 75% or less).
  - b. In climb from sea level through 5,000 feet *density altitude*, mixture must be *full rich*. For continued climb above 5,000 feet, mixture may be leaned to prevent an excessively rich mixture and to obtain smooth engine operation.

DO NOT confuse the 5,000 foot reference for climb with the cruise configuration.

- c. Operation at higher than 75% power without reverence to fuel flow, cylinder head temperatures, and without knowledge of specific power, requires full rich mixture.
  - d. Lean to the MAXIMUM POWER RANGE (see chart) for take off from high elevation airports.
2. Textron Lycoming *turbocharged* engines.
- a. The turbine inlet temperature gage (TIT) is a required instrument with turbocharging.
  - b. During manual leaning, the TIT must not exceed the temperature limit specified in the POH. Although a few specify a higher temperature limit, 1650 degrees F (900 degrees C) is the limit for most installations.
  - c. When leaning the mixture at cruise power, if TIT limit is reached before reaching peak, do not exceed the limit to find peak.
  - d. Operation may be at peak during cruise provided TIT does not exceed red line maximum and cylinder head temperature is at or below the 435 degrees F (221 degrees C) recommended for continuous operation. Mixture may be adjusted anywhere on the rich side of peak provided CHT, fuel flow and TIT all remain within limits defined in the POH.
  - e. All full throttle operation, including all takeoffs, with turbocharged powerplants must be at full rich mixture regardless of operating altitude or airport elevation. Excess fuel is needed for cooling and detonation suppression because of the high induction air temperatures created by turbocharging.
  - f. Always consult the POH for variations of procedure and limitations which apply to the engine installation of each specific aircraft model.

To summarize, service instruction No. 1094, the Engine Operator's Manual, and the Pilots Operating Handbook give specific leaning information for the engine or aircraft model. These additional summary items also apply to the leaning of Lycoming engines. Proper leaning is a factor in keeping CHT in the specified temperature range. The engine should be operated at a lean setting during descent from cruise altitude to traffic pattern altitude. The mixture control should be placed in rich before increasing power. Normally aspirated, direct drive Lycoming engines should be leaned for cruise (75% power or less) at any altitude. Because leaning techniques vary, the POH for each aircraft should be carefully studied. Finally, a thorough checkout in the aircraft will help leaning as well as all other operating techniques.

★ ★ ★

## WE HAVE A NEW NAME BUT LYCOMING IS THE SAME

Have you ever wondered why the rugged, reliable powerplant under the cowling of your aircraft is called Lycoming? Readers who have visited the Susquehanna Valley in central Pennsylvania may know some of the history. For those who rely on a Lycoming engine, but are not aware of its origins, perhaps we can share some of a proud past and present.

To go into the deep past, it is said that the Indians who inhabited this region of central Pennsylvania used a term similar to Lycoming to describe a creek with a sandy bottom. From that terminology, the name Lycoming Creek was given to the stream which flows into the Susquehanna River at the place where Williamsport is located. The county which makes up the land area in this region is also named Lycoming County.

With this background, it was appropriate that a small company formed at Williamsport, Pennsylvania in 1908 should be named — Lycoming Foundry

and Machine Shop. This company first made bicycles and sewing machines, but soon started producing automobile engines. The company was renamed Lycoming Manufacturing Company and during the next 25 or 30 years, Lycoming automotive and marine motors — as they were called then — developed an excellent reputation. In 1928, the first Lycoming aircraft engine was designed and built. Known as the R-680, this engine was soon powering personal aircraft, airliners, and military trainers. This engine soon achieved a reputation for excellence.

During this period of growth and development, the Lycoming Manufacturing Company became part of a large transportation empire owned by E.L. Cord. When Cord sold out in the mid-1930s, a restructuring took place. The automotive and marine engine business was moved to Auburn, Indiana, while production of aircraft engines remained in Williamsport. The Cord Corporation was then renamed Aviation and Transportation Corporation

(ATCO).

Under ATCO in the corporate structure was The Aviation Corporation which had several manufacturing units, including Lycoming. As time passed, the major ATCO units were split up and became independent operations. At the end of World War II, the Aviation Corporation diversified into a variety of products aimed at the home consumer market. The aviation name no longer described the corporation, and in 1947 the shortened and more general term, AVCO, was chosen as the corporate name. Through the years since that time, Lycoming has continuously been an aviation related part of the corporation.

The 1980s is a decade which will be marked in history for the extreme number of company take-overs and mergers. The merger of Textron Inc. and Avco Corporation in 1986 has placed Lycoming under a new corporate structure and affected the name under which we operate. For many years, our customers knew us as Avco Lycoming Williamsport Division. Over the past two years, the title was Avco Lycoming Textron. To more clearly define the relationship of Lycoming within the new corporate structure, an additional name modification has recently been instituted; Textron Lycoming is now the name which will identify the producer of Lycoming engines.

Although the unit name has changed, the family of reliable Lycoming reciprocating engines produced in Williamsport, Pennsylvania has not changed. People associated with general aviation simply use Lycoming to identify the engines manufactured here. Those highly regarded engines and the skilled people who design and produce them are the same as in the past.

This brief history of Lycoming is an indication that changes in company structure continue to occur today just as they did in the past. We do not want engine owners to be confused by this. Advertisements and brochures will have the Textron Lycoming identity, but Williamsport is still home for Lycoming reciprocating engines. Just remember that we intend to respond to your engine needs whether you call us by the official title, Textron Lycoming, or simply Lycoming as you have in the past.

★ ★ ★

---

## JOURTJÄNSTEN

Alla som ännu ej tecknat sig för Jourdagarna för 1989, har fortfarande tillfälle till detta. Listan ligger på exp och det finns stora luckor i Juni, Juli och Augusti. Observera att lördagar och söndagar från och med 1 Maj till 27 aug skall jouten fördelas på två pass. Det första på 08<sup>00</sup> - 16<sup>00</sup> = 2 poäng. Det andra från 16<sup>00</sup> till flygverksamhetens slut för dagen = 1 poäng. Vill Du binda dig för hela tiden skall Du fylla i ditt namn på två ställen. Du får då 3 poäng för en sådan lördag.

Omkring 1 mars drages listan in. De dagar som ej blivit tecknade lottas ut bland de flygande ordinarie medlemmarna som ej tagit tillfället i akt, att frivilligt placera in sina joutillfällen.

Du som blir lottad får ett personligt brev som visar vilka dagar Du ansvarar för. Kan Du ej ställa upp vid dessa tillfällen, ansvarar Du själv för att skaffa ersättare.

En annan utväg för Dig som absolut ej kan ställa upp och gå jour, är att meddela skriftligen till klubben och då acceptera att 500:- drages av på ditt pilotkonto.

L.Lönn

Dragningen för Dec -jouten utföll på: 368 Håkan Jansson.

**GRATTIS!**

### Oljeredovisning

Vid varje års inventering och redovisning av vårt oljeförråd framkommer att 100-tals liter olja ej blivit uppskrivna i oljeliggaren, när vi fyllt på i fpl. Denna försumlighet kan ej accepteras! Tänk på att oljan kostar omkring 20 kr/litern. Vi måste hålla kontroll på både den ekonomiska biten och på hur mycket respektive flygmotor förbrukar mellan tillsynerna.

Alltså skärpning! L Lönn



# Tävla och Umgås

För att öka spänningen och trevnaden kring våra flygtävlingar kommer vi i tävlingskommitten att ha priser till varje tävling under året enligt följande.

**1:a pris varor för c:a 300:–**

**2:a pris varor för c:a 200:–**

**3:e pris varor för c:a 100:–**

**Dessutom kommer tröstpris att delas ut till samtliga deltagare.**

Dessa priser delas ut efter respektive tävling i klubbens lokaler där då alla tävlingsdeltagare samlas under en enkel ceremoni med förtäring till självkostnadspris. *Varje pris måste mottagas personligen* vid denna träff efter tävlingens slut.

Priser enligt vanlig modell (vandningspriser, plaketter och dyl.) kommer som vanligt att delas ut under årsmötet.

*Vi hoppas att vi med detta initiativ får igång ett stort intresse för en levande tävlingsverksamhet och en trivsam klubbanda.*

**Tävlingskommitten**

Dear Mr. [Name],

I have received your letter of the 15th and am glad to hear from you.

- I have your letter of the 15th
- I have your letter of the 15th
- I have your letter of the 15th

I am sorry that I cannot give you a more definite answer at this time.

I will be glad to discuss this matter with you further if you wish.

I am sure that you will understand my position.

I am very sorry that I cannot give you a more definite answer at this time.

Sincerely,  
[Name]

## TÄVLINGSKALENDERN 1989

<u>Datum</u>	<u>Kl.</u>	<u>Tävling</u>	<u>Arrangör</u>
890311	10.00	Gripen 1	Horst Komarek
890318	10.00	Gripen 1 (reservdag)	Horst Komarek
890410	18.00	Gripen 2	Leif Thelander
890417	18.00	Gripen 2 (reservdag)	Leif Thelander
890506- 890507		Stockholm Open Bromma	
890508	18.00	Gripen 3 R	Håkan Bengtsson
890516	18.00	Gripen 3 (reservdag)	Håkan Bengtsson
890520		Vårtävlingen	Björn Kullberg
890527		Vårtävlingen (reservdag)	Horst Komarek
890529	18.00	Gripen 4 R	Leif Thelander
890603- 890604		Stjärntävlingen, Visingsö	JFK
890605	18.00	Gripen 4 R (reservdag)	Leif Thelander
890616- 890618		SM Trollhättan	
890629- 890702		NM Norge	
890722- 890723		Nils Holgerssonstrofén Värmland	
890807	18.00	Gripen 5 R	Horst Komarek
890814	18.00	Gripen 5 (reservdag)	Horst Komarek
890826- 890827		Augustinaven Norrköping	NFK
890909- 890910		Arosnaven Västerås	VFK
890916		Klubbmästerskap (KM)	Rune Carlsson
890923		KM (reservdag)	Rune Carlsson
890930		Gula Spåret	B-G Nilsson
891007		Gula Spåret (reservdag)	B-G Nilsson
891014	10.00	LM + Gripen 6	Björn o. Erik
891021	10.00	LM + Gripen 6 (reservdag)	Kullberg

Landningstävling märkt R ingår i rikslandningstävlingen.

Inbjudningar till tävlingar utanför Linköpings Flygklubb kommer att anslås på tävlingskommittens anslagstavla.

Tävlingskommitten önskar alla en trevlig flyg- och tävlingssäsong.

Linköping 1989-01-25

Godkänt med förbehåll  
av SAAB SCANIA AB

  
Björn Kullberg

  
Horst Komarek

RESULTAT NATTUGGLAN 1988-12-12.

1. Lennart Angvik
  2. Tage Wennström
  3. Ebbe Hjertstedt
  4. Seve Barth
  5. Göte Anghed
- 

**NÄSTA KONTAKT**

Preliminärt manusstopp för nästa Kontakt är 1989-03-27.