RFC Dallas Flying Club

Volume 3, Issue 6 Editor: Al Benzing albenzing@compuserve.com September, 2003

RFC Dallas - Monthly Meeting

RFC Dallas meetings are the 3rd Tuesday of the month. The next meeting will be Tuesday, September 16th at 7:30 p.m. Meeting place is the Addison Airport Fire Station. Note: There are times, such as when the National Security Level is increased, that this location is not available. We will advise you via email if there is a change of venue. The **alternate** location is at the Million air FBO at Addison.

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Treasurer's Report

For August 2003 Flying
Jim Marberry - **RFC Dallas Treasurer**

August was a good month financially. Our net worth continued its modest increase, with a rise of $560 to $1,480. Cash flow was stable; the bank account was unchanged from July at $12,000 after paying Million Air for our fuel purchases early in the month. To put a perspective on this, our deposits during August were $27,000, so your continued timely response to paying your balance on the statements is necessary for us to be able to pay our bills in a timely manner. Accountants will note that we turn over the account more than twice a month.

We also had a favorable change with one of our long-term arrears accounts. Accounts in arrears reached a low of $8,900 compared to $24,000 about a year ago.

Concorde, in formation with the British 'Red Arrows'

The focus of this issue of the Club Newsletter is Concorde. While we are a General Aviation Flying Club, our members come from a wide variety of backgrounds. More importantly, we have a wide variety of Aviation interests.

As you may know, Concorde is being retired from active airline service this year. Only three airlines flew this fine bird, Braniff, Air France and British Airways. Braniff, sadly, is long gone. Air France completed their last Concorde flight this summer and British Air is scheduled to fly the last flight in October.

This will be the end of a glorious era of supersonic passenger flight. Research continues on ways to reduce the effects of the "sonic boom", which will be the key to political approval of future super sonic aircraft.

One of our long time RFC Dallas members, Norwood Band was a Flight Engineer and a First Officer on Concorde, for Braniff Airways. I believe he's unique in being the only pilot to check out in both positions on this aircraft. I hope you also enjoy the pictures from Norwood's archives.

Al Benzing, Editor

The Board members have worked hard on this aspect of our finances this past year. The new policy of probationary access to the airplanes for arrears accounts has not yet had to be applied, which is desirable for all concerned.

Flight activity continued in a normal summer style. The weather over the Labor Day weekend disrupted many plans, including mine. Having the last day of the month in the middle of a three-day weekend is a problem for me [I'm looking for sympathy, folks!]. I want to pick up timesheets before flights that will end the following month.

All the planes were scheduled out for the weekend, and I picked up the first timesheet Wednesday evening. The forecast and actual thunderstorm activity meant that plans for three planes changed. Shorter flights were made in August for planes that were supposed to be gone into September. So some flights that should have been billed in August won't be billed until September. The life of a treasurer is not always easy. [Can you hear the violins playing?]

More to the point, be sure to use the reservation system properly. We don't have the option of making a contingency reservation, so if you don't go be sure to cancel. And if the idea of making a short flight on such a weekend sounds good, check the system. The plane may be available after all. No one with a reservation should be offended if another member calls asking for a return call if the primary pilot's plans change. Make the situation work for all of us.

The numbers for August flying are as follows:

A/C	Flights	Hours	Hrs/Flt
16W	17	53.3	3.3
46L	11	21.3	1.9
03V	16	64.7	4.0
92V	15	32.1	2.1
93J	17	55.4	3.3
Totals	76	226.8	3.0

Note the four hours per flight recorded by 03V.

We had six new members join during or following the last meeting. Sewall Cutler, Jessen Fahey, Will Fitzpatrick, James Flener, Russell Miller and Dan Sampson are welcome.

Four members terminated their membership in August: David Bott, Bob Chaplin, Chris James and Bob Rogers. Bob Chaplin has been inactive for some time, while Bob Rogers needs the time, money and effort to build his new Mustang II. With Steve Freeland reactivating his membership, the number of active members stands at 97.

Here's a note for our new members. There's a section of the reservation system where you can update your personal information. If you're still hearing "New Member" when you dial in, go to that section and record your name. It will help us correctly identify the status of reservations. As with other parts of the system, it's very easy to make the change.

On a personal note, the runway at ADS was closed the evening of 8/12 by a gear event. Four planes flying at McKinney stopped there to evaluate options, including Tommy Norman and me in the Cardinal. When it was obvious it was going to be a long event, Tommy's wife picked us up and got us back to our cars at ADS. Circumstances allowed me to pick up the Cardinal the next morning and get it back to our parking spot.

I hadn't flown solo in the left seat for some time and my landing wasn't really great, so I looked it up. It had been two years, two months and 425 hours since I'd flown solo. Norwood thought the time span and the modest-quality landing ought to tell me something. Maybe it would be the same for you if you haven't flown for a while.❖

Bonanza's Get High Performance Air Filters

By Stuart Thompson

In the month of August, all three Bonanzas were outfitted with new STC'd air filters. This new filter, developed by K & N and marketed by Challenger Aviation, has less air resistance and increases manifold pressure by 1 inch. They will give the six cylinder Continental's a claimed 3 horsepower increase, thereby increasing climb and TAS numbers over the factory OEM filters. Other Bonanza owners have verified these performance increases. Enjoy.

The Early History of RFC Dallas, Incorporated

By Jim Marberry

Our historical records of RFC Dallas and its predecessors begin with a "Notice to Members and Interested Friends" dated July 1, 1979. This notice is written with a light style but covers important changes and procedures for operations in the Rockwell International Flying Club (Dallas Chapter). Included are updates on costs ($21 per hour for pilots, $19.50 per hour for students), dues ($22 per month plus $5 for each family member), deposits, terminations, Air Park refueling procedures, reservation procedures (you talked to a real person!) and procedures to be followed with better discipline.

There are references in the notice to four individuals who are active at that time and who are involved in club operations. There are also references to two airplanes, a Cheetah and a Cessna 152. By the fall of 1980 [apparent date] there was a need for a poll as to whether the Cheetah's performance was satisfactory to the members. Apparently it wasn't, because shortly thereafter the two club planes were an Archer and a different C152.

Financial and flight records from FY1980 (through June 30, 1980) show an active membership of 23 members, including three women. One man in this list, Oz Asleson, is still an active member in the club while another, Rolf Wollan, is on our roster as an inactive member. [*Editor's note: During WWII, Rolf was involved in early testing of the ILS system. Later on, he was one of the early developers of the flight director system who, together with Art Collins at Collins, held a patent on a flight director. We are sad to report that we lost Rolf last fall. He was 86.*] The club apparently had CFI's that flew in the club who were not members; at least, there are names on the flight sheets with no corresponding financial records.

The first application to join the club that's in our records is dated July 4, 1980. Ten men and three women joined during FY 1981. This group included Cal Young, currently inactive, who, together with Rolf Wollan, leased the first Debonair to the club in October 1984. N3090T flew in the club for over fourteen years. The club had a Commander 114 on its flight line for a period in 1982, otherwise we've flown Beechcraft, Cessna's and Pipers.

Our records don't show the specifics of the relationship between the company, Rockwell International, and the Chapters. There were apparently Chapters at thirteen locations, individually autonomous but with an overriding Board of Directors in California. The clubs were primarily for Rockwell's employees, but non-employee memberships could be sponsored by an employee.

A proxy notice describing three changes to the By-Laws, dated March 3, 1981, is the next item in the files. It references a letter agreement dated 1972 between the club(s) and the company with regard to the use of the company name. In 1981 the use of the company name was to be discontinued, and the Dallas Chapter became RFC Flyers, Incorporated. It also became autonomous in its handling of the costs of operation. We became RFC Dallas, Incorporated, a Texas non-profit corporation, about July 1, 1982.

Twenty-one further applications were received during FY1982 before the first termination, in September 1982, was recorded. There were often family groups, couples or children, on these applications. There is an impression that the Chapter was definitely a social group at that time, in that the flight activity was modest and in the following years the periods of active membership were often rather short. The reasons for leaving the club then were the same as they are now: changing jobs, being transferred, money concerns, family interests, etc. Through the end of FY 1982, four airplanes and 64 people were associated with the club.

The overall view of this early history is that the club had similar interests and concerns then as we do now. ❖

Member Profile…

Member Profile will be a frequent, perhaps monthly feature to highlight members of RFC Dallas.

While we have quite a few who have been members for many years, there are also many of us who know little about other members of the Club. I have a generic outline for presenting a Profile, which will be included at the end of the Newsletter. It would be nice to have several on hand, so they can be included in future issues. With that in mind, spend a little time writing up a rough draft of a profile you'd like to submit for the Newsletter. I'll work with you to fine tune it. Photos are most welcome.

Since Concorde is being featured in this issue, it is fitting that Norwood Band, one of the long time members of RFC Dallas provide the first Member Profile. As many of you know, he was one of the fortunate few who had an opportunity to fly that great bird.

Here are some highlights from the extensive professional flying and instructing career of Norwood Band, followed by his articles:

Nov. 1998- Instructor Pilot: CAE Simuflite-Grapevine Center Instructing in Cessna Citation, Citation I, Citation II, S-II, and Citation V.

May 1998- Captain, Check Airman: Championship Airways.
Nov. 1998 A Part 125 carrier based at Addison Airport flying the Mavericks DC-9-30 in support of the Dallas Mavericks Basketball Team.

1983-1998 Captain, First Officer: Piedmont Airlines, U. S. Air, U.S. Airways
Flew the F-28, F-100, B-737 and DC-9-30. Retired from U.S. Airways in April 1998.

1982-1983 Simulator Instructor: Burnside-Ott
Instructed in T-2C's at NAS Chase Field, Beeville, Texas.

Wondering how to write a Profile? Some Guidelines:

1) How did you get interested in flying.

2) Where did you do your flight training.

3) What Ratings? How many Hours?

5) What types of a/c have you flown/owned?

6) Why do you fly/what flying do you enjoy?

7) How does RFC fit into your flying needs?

8) Interesting flight experiences you've had.

9) Tell us about some interesting destinations.

10) Tell us about some interesting aviators you've met.

Info on your career, aviation related or not would be of interest. Send a personal photo and flying photos!

1966-1982 Captain, First Officer, Second Officer (Flight Engineer): Braniff International Airways, until Braniff terminated flight operations.

1968-1975 Substitute Teacher: Richardson Independent School District, Richardson, Texas. Substitute teacher at all grade levels and disciplines from 4th grade through 12th grade.

1960-1966 Officer/Pilot: United States Marine Corps
Flew various aircraft from helicopters to multi-engine transports.
Flew in Vietnam during 1964-65, earning the Air Medal with two stars.
Secondary duties involved obtaining personnel to fill rosters and transfer Marines to and from Vietnam, Okinawa, and Iwakuni, Japan and to and from the U.S.

Flight instructor from 1965-1966 at NAS Pensacola in basic instruments, formation, advanced instruments (cross-country), and TPA (transition and precision acrobatics). Also served as Student Personnel Officer at the squadron level and Standardization Board Member.

Community Service:
American Cancer Society-Active member for over twenty-five years. Held several offices and responsibilities including Vice-president for three years and Board member for twenty years. Dialogue Group member. Cancer Survivor.

Boy Scouts of America-Webelos Den Leader, Troop Treasurer, Board of Review, Troop Board Member, and Assistant Scout Master.

First United Methodist Church, Richardson, Texas-served on various different board and commissions. Currently serving as a Stephan Minister.

Kiwanis, Richardson Central-Member of Board, Vice-president, IDD Chairman, Fountain Festival Chairman, President Elect, President, Past-President, and Wildflower Festival Chairman

RFC Dallas, Inc.-Flying Club based at Addison Airport, Addison, Texas. Member of Board of Directors, Safety and Training Officer for the past 17 years. Responsible Club check out and currency requirements, all aspects of safety.

Trojan Phlyers- President T-28 flight demonstration team participating in air shows throughout the continental United States.

Active in most sports with emphasis on sailing, racquetball, and tennis. Read literature extensively. Enjoy flying light aircraft and helping friends further their skills and abilities.

Married with three grown children.

Aircraft Time

T-34	32.9
T-28	1,115.2
SNB/C-45	68.5
HTL-6	37.2
HO4S-3	30.9
HUS-1/H-34	730.6
OH-43D	4.4
OE-1/O-1B	1.1
C-117D	2.0
B-727-100,-200	8,250.5
B-747-100,-200, SP	418.2
Concorde	346.2
L-188	491.3
DC-8	71.3
Commander 112-B	14.4
DC-10	1.0
BAC-1-11	5.0
B-33	240.0
C-172	25.3
Archer	180.4
Cherokee 235	151.1
F-28-4000,-6000	1,494.4
B-737-200,300,400	7,381.5
F-100	683.3
DC-9-30	3,656.6
CE-500	4.6
Totals as of 1999	25,400+

Concorde

By Norwood Band

What is Concorde? What is it like to fly? What was the training like? Is it as good an aircraft as people say or is it just a waste of time, money, & fuel? I hope to answer these questions and a lot more in this article.

What is Concorde?

Concorde is 1950's technology that flew into the 21st century. The initial plans started around the mid '50's in both France and England. They had different ideas on size, use, and speed.

Somehow, two countries that together aren't much bigger than Texas managed to do something that neither the United States nor the USSR could accomplish. England and France have fought many wars over the years. They are so very close but cannot even operate on the same time. Yet, they managed to get together and develop a supersonique (French Spelling) aircraft that was designed to cruise faster than the speed of sound without using afterburner. There are faster aircraft in the world. There are more maneuverable aircraft. But there isn't any aircraft that was designed to cruise supersonically and carry passengers at the same time.

Think about the fastest fighter you can imagine sitting on the ground at full power, afterburners going. If it were possible to keep the tanks full and Concorde flew overhead, it could not catch up. The fuel would run out first. Concorde would be carrying passengers going Mach 2.02 enjoying a fine meal with all the refinements of a first class restaurant. What a comparison!

Concorde is high speed transportation designed to cover long distances in comfort and luxury.

What is it like to *Fly*?

Concorde is one of the easiest, most maneuverable airplanes I've had the pleasure of flying. It is very responsive to inputs and can do things that you wouldn't normally think about in other planes. It is however a very complicated and sophisticated piece of equipment.

Let's think about it. It has thirteen (13) fuel tanks. Fuel can be moved from any tank to any other tank. Fore and aft or side to side. C.G. can be and is moved in flight to maintain optimum control. As you accelerate the center of pressure moves aft. In order to maintain control, the C.G. is moved aft by transferring fuel. This is not a big problem with subsonique aircraft, but becomes a major problem when you go fast. Fighters aren't designed to cruise supersonically, but they still have to deal with this. When you cruise supersonically, it becomes a big factor.

The flight controls aren't what one would expect. Unlike subsonic aircraft, Concorde does not have an elevator, flaps, ailerons, speed brakes or leading edge devices. It does have a rudder and elevons.

The elevons are amazing as they control both pitch and roll as well as drooping when you slow down to act like flaps. Flight controls are fly by wire. As a matter of fact there are three complete sets of these wires. They are color coded yellow, green, and blue. In addition there are mechanical connections in the event all the electrical controls failed.

A good aircraft or a waste of money?

Concorde, in my opinion is a first step. No one except the British and French were able to design, build and successfully fly a supersonic aircraft.

We tried and never got in the air. The Russians got in the air, but had so many problems they had to shutdown.

We learn by trying, failing, retrying and finally succeeding. Concorde was that success. It operated as designed. It is not particularly fast (Mach 2.02), it was not particularly fuel efficient but was designed when Jet fuel sold for 9 cents per gallon. There are faster airplanes and more fuel efficient airplanes, but no other airplanes does what Concorde does. Three and one-half hours across the Atlantic. Unreal. You decide.

A true step ahead. Somehow the problem of fuel efficiency, speed, and quiet will be overcome and Concorde will look like a horse and buggy.

What was the training like?

Training, which took place primarily in Toulouse, France, was one of the longest and most involved programs I have ever been in. The way it was taught was also completely different from conventional airline training programs, in the 1970's

Originally we were told that it would take three to four months depending on aircraft availability. It was all of that and more.

The instruction, after brief introductory courses on high speed aerodynamics, physiology, and a couple of other subjects I have forgotten, was like something I have never encountered before or since. We sat in little cubicles with two screens in front of us and a tape recorder. Each system was introduced, explained, questioned, and reviewed automatically. When the questions, came, you had several choices. You selected one. If it was correct they would congratulate you and go on. If it was wrong, they would explain that part again and then ask the same question. If it was still wrong, they would give a third explanation and then ask the question. This time, if it was still wrong, a red light would come on and get the instructors attention. He would then try to find out what you didn't understand and explain it in his fractured Franglish.

There were no abnormals and emergencies. Nothing could go wrong. If you asked, "What if?", you were told it would be covered later.

We trained as crews, Capt. F/O, and S/O (Pilot, Copilot, and Flight Engineer). After covering all the systems, we went to the simulator and did all the normal things, from starting the engines, taxi, takeoff, subsonic cruise, acceleration, supersonic cruise, deceleration, descent, approach, and landing. These tasks were mastered in many Sim sessions before any abnormals or emergencies were introduced.

We, the crew, now pulled out the aircraft manual and covered each system and it's abnormals and emergencies. This was done with an instructor and a mock up of that system. The mock up reacted in accordance with which switch we moved or button we pushed, as we read and accomplished each procedure. From now on nothing would operate normally.

We then went back into the simulator and repeated all the previous procedures, but now almost everything was abnormal or an emergency. Now we were ready(??) for an oral which involved describing each system to the FAA and explaining how it was supposed to work and what we would do if it didn't. Approximately 2-4 hours.

After the oral, more Sim time putting everything together and trying to get ready for the check ride. All together, we had more than 150 hours in the Sim. We also had to do a LOFT (Line Orientation Flight Training) for both the Brits and the Frogs. Some fun.

Now comes the airplane training. We initially went to Ireland, but were informed that they were going to go on strike, and could only get refueled once. We got refueled and flew to Montpellier. Now we learned to put everything together and actually fly this magic machine. Finished at last. Let's go home and start flying passengers.

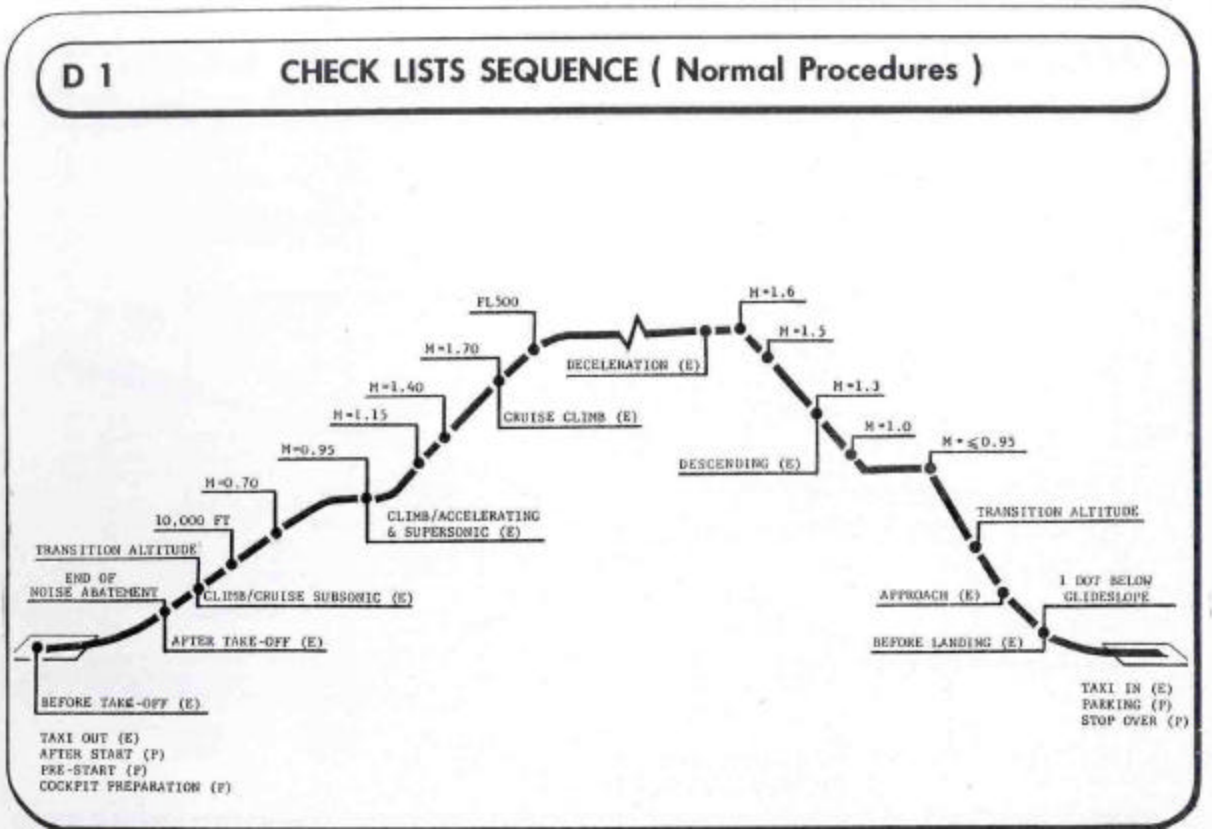
Not quite! Although the British and French have been flying Concorde for a while with passengers, they have never demonstrated an evacuation. This is a FAA requirement and was done in London Heathrow. A WORLD RECORD! Of course, since it was never done before, it was a world record.

OOOOOOPS! We're not finished yet. We still have to do proving runs for the FAA and get our line check. Finally the plane goes on line. We have learned a great deal and have spent maaany hours in study as a group and as crews.

This picture, of two Concorde's doing a “flyby” strikes me as hauntingly beautiful. Two awesome birds in flight.

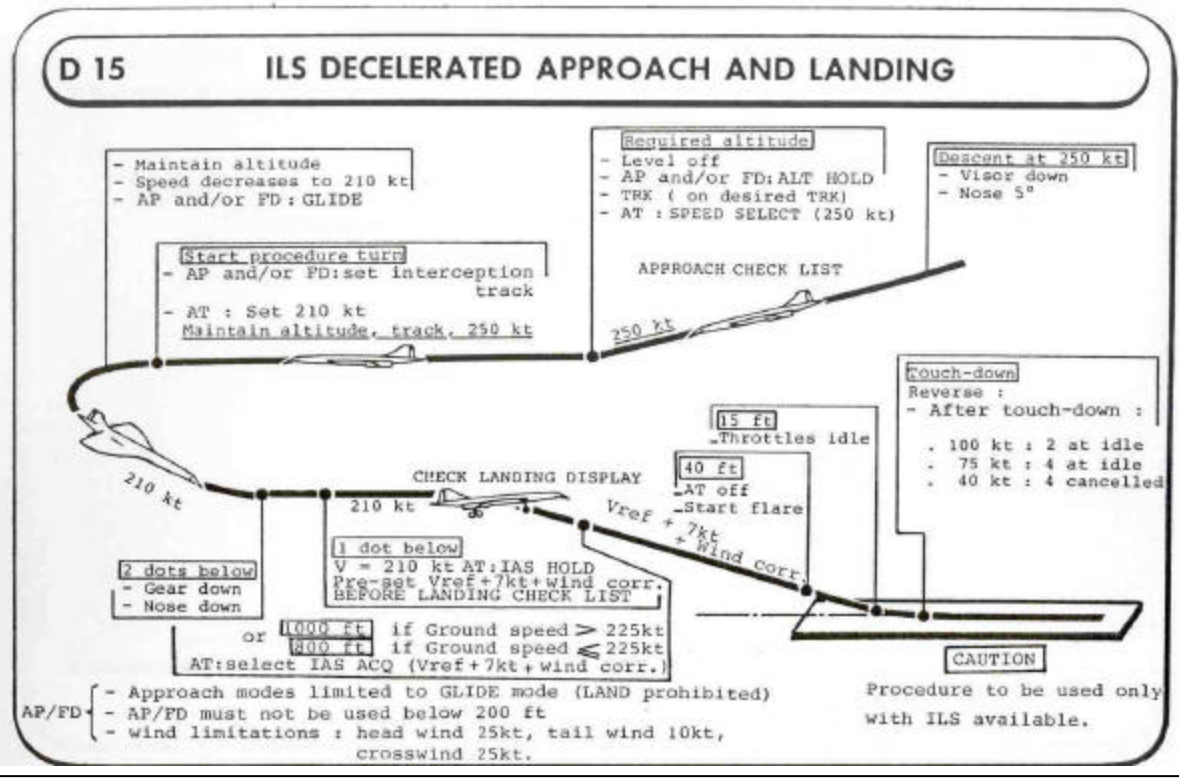
An impressive sunlit underside, highlighting the elegant delta wing, under-slung engines and elongated tail.

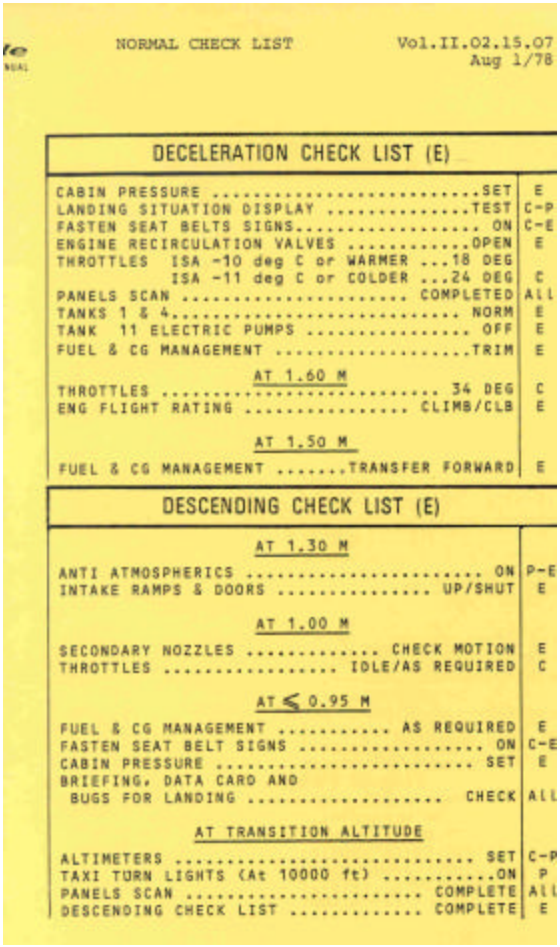
Norwood, performing a cockpit preflight from the left seat. On the Right, a display of the huge number of lights and switches the Flight Engineer is expected to master.
No extra charge for the youthful retouching of the photos.



Above: There's a Checklist for every Phase of Flight, from Cockpit Preparation to Parking.

Below: An example of "Normal Procedures", which can be quite complex in a sophisticated airplane.





NORMAL CHECK LIST Vol.II.02.15.07 Aug 1/78

DECELERATION CHECK LIST (E)

CABIN PRESSURE ..... SET	E
LANDING SITUATION DISPLAY ..... TEST	C-P
FASTEN SEAT BELTS SIGNS ..... ON	C-E
ENGINE RECIRCULATION VALVES ..... OPEN	E
THROTTLES ISA -10 deg C or WARMER ...18 DEG	
ISA -11 deg C or COLDER ...24 DEG	C
PANELS SCAN ..... COMPLETED	All
TANKS 1 & 4 ..... NORM	E
TANK 11 ELECTRIC PUMPS ..... OFF	E
FUEL & CG MANAGEMENT ..... TRIM	E
AT 1.60 M	
THROTTLES ..... 34 DEG	C
ENG FLIGHT RATING ..... CLIMB/CLB	E
AT 1.50 M	
FUEL & CG MANAGEMENT ..... TRANSFER FORWARD	E

DESCENDING CHECK LIST (E)

AT 1.30 M	
ANTI ATMOSPHERICS ..... ON	P-E
INTAKE RAMPS & DOORS ..... UP/SHUT	E
AT 1.00 M	
SECONDARY NOZZLES ..... CHECK MOTION	E
THROTTLES ..... IDLE/AS REQUIRED	C
AT ≤ 0.95 M	
FUEL & CG MANAGEMENT ..... AS REQUIRED	E
FASTEN SEAT BELT SIGNS ..... ON	C-E
CABIN PRESSURE ..... SET	E
BRIEFING, DATA CARD AND BUGS FOR LANDING ..... CHECK	All
AT TRANSITION ALTITUDE	
ALTIMETERS ..... SET	C-P
TAXI TURN LIGHTS (At 10000 ft) ..... ON	P
PANELS SCAN ..... COMPLETE	All
DESCENDING CHECK LIST ..... COMPLETE	E

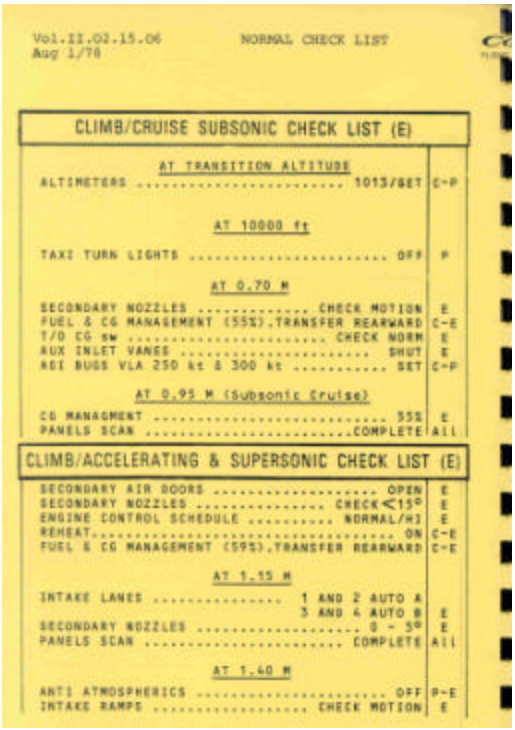
Here are examples of "Normal" and "Abnormal" Checklists.

As you can see "Supersonic" is not simple.

Notice on the left, that there are separate checklist items for 1.60M, 1.50M, 1.30M, 1.0M, < 0.95M.

Similarly, on the right, each speed and altitude increment has separate checklist items.

The multitude of checklists and procedures keep a crew busy even under normal conditions.



Vol.II.02.15.06 Aug 1/78 NORMAL CHECK LIST

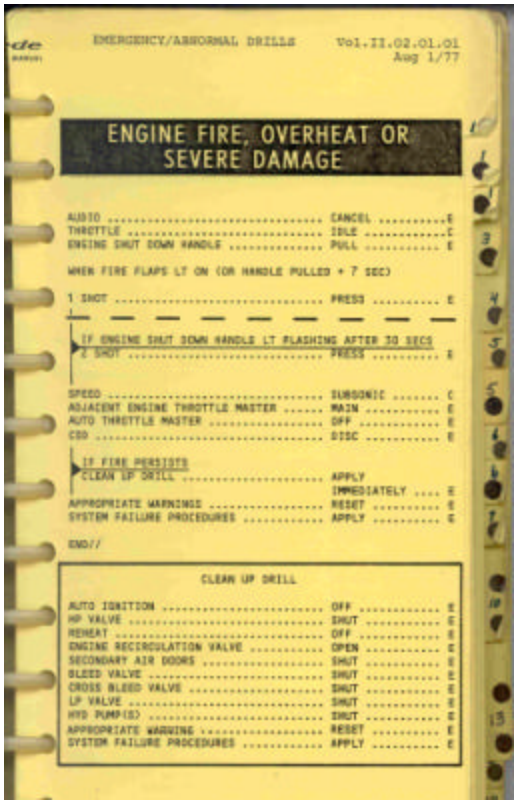
CLIMB/CRUISE SUBSONIC CHECK LIST (E)

AT TRANSITION ALTITUDE	
ALTIMETERS 1013/SET	C-P
AT 10000 ft	
TAXI TURN LIGHTS ..... OFF	P
AT 0.70 M	
SECONDARY NOZZLES ..... CHECK MOTION	E
FUEL & CG MANAGEMENT (55%), TRANSFER REARWARD	C-E
T/O CG sw ..... CHECK NORM	E
AUX INLET VANES ..... SHUT	E
ASI BUGS VLA 250 kt & 300 kt ..... SET	C-P
AT 0.95 M (Subsonic Cruise)	
CG MANAGMENT 55%	E
PANELS SCAN ..... COMPLETE	All

CLIMB/ACCELERATING & SUPERSONIC CHECK LIST (E)

SECONDARY AIR DOORS ..... OPEN	E
SECONDARY NOZZLES ..... CHECK <15°	E
ENGINE CONTROL SCHEDULE ..... NORMAL/HI	E
REHEAT ..... ON	C-E
FUEL & CG MANAGEMENT (59%), TRANSFER REARWARD	C-E
AT 1.15 M	
INTAKE LANES ..... 1 AND 2 AUTO A, 3 AND 4 AUTO B	E
SECONDARY NOZZLES ..... 0 - 5°	E
PANELS SCAN ..... COMPLETE	All
AT 1.40 M	
ANTI ATMOSPHERICS ..... OFF	P-E
INTAKE RAMPS ..... CHECK MOTION	E

Samples of Abnormal Checklists show the level of complexity of systems and procedure.



EMERGENCY/ABNORMAL DRILLS Vol.II.02.01.01 Aug 1/77

ENGINE FIRE, OVERHEAT OR SEVERE DAMAGE

AUDIO ..... CANCEL ..... E
THROTTLE ..... IDLE C
ENGINE SHUT DOWN HANDLE ..... PULL ..... E

WHEN FIRE FLAPS LT ON (OR HANDLE PULLED + 7 SEC)

1 SHOT ..... PRESS ..... E

IF ENGINE SHUT DOWN HANDLE LT FLASHING AFTER 30 SECS
2 SHOT ..... PRESS ..... E

SPEED ..... SUBSONIC C
ADJACENT ENGINE THROTTLE MASTER ..... MAIN ..... E
AUTO THROTTLE MASTER ..... OFF ..... E
CSD ..... DISC ..... E

IF FIRE PERSISTS
CLEAN UP DRILL ..... APPLY IMMEDIATELY .... E
APPROPRIATE WARNINGS ..... RESET ..... E
SYSTEM FAILURE PROCEDURES ..... APPLY ..... E

END//

CLEAN UP DRILL

AUTO IGNITION	OFF	E
HP VALVE	SHUT	E
REHEAT	OFF	E
ENGINE RECIRCULATION VALVE	OPEN	E
SECONDARY AIR DOORS	SHUT	E
BLEED VALVE	SHUT	E
CROSS BLEED VALVE	SHUT	E
LP VALVE	SHUT	E
HYD PUMP(S)	SHUT	E
APPROPRIATE WARNING	RESET	E
SYSTEM FAILURE PROCEDURES	APPLY	E

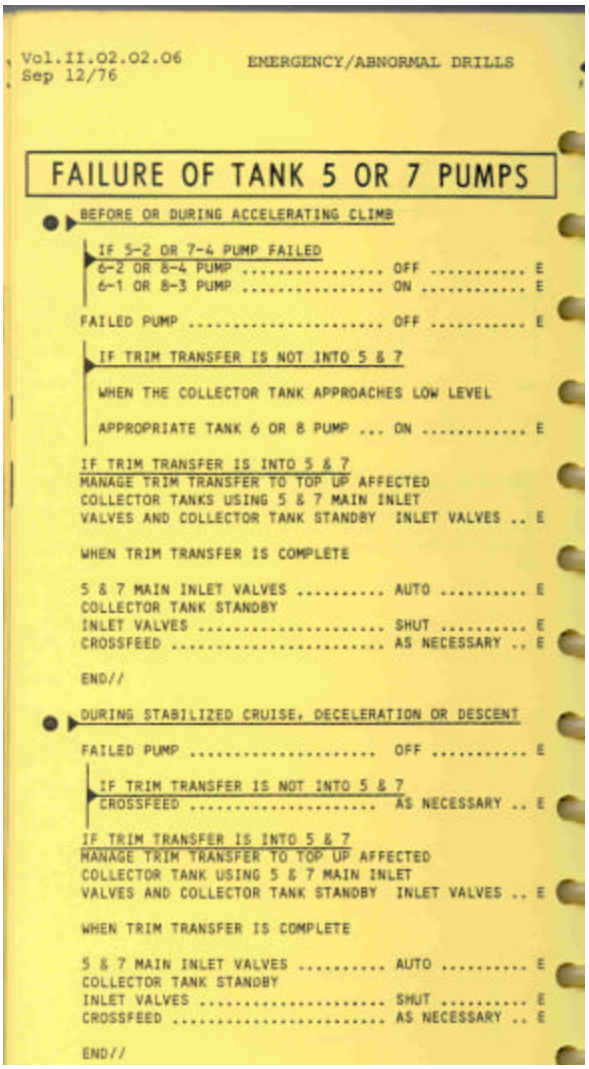
Engine Failure Checklist isn't overlay complex, until you consider that some important decisions must be made to determine the actual problem.

Procedures vary, depending on whether you've had a simple Flameout, Fire, or more Severe Damage.

The Fuel Abnormals are very complicated due to the 13 tanks, with associated pumps and the necessity of maintaining different fuel/CG balances during each phase of flight.

It requires a well-honed crew to handle a serious abnormal.

Note that fuel does not allow for lengthy delays.



Vol.II.02.02.06 Sep 12/76 EMERGENCY/ABNORMAL DRILLS

FAILURE OF TANK 5 OR 7 PUMPS

BEFORE OR DURING ACCELERATING CLIMB

IF 5-2 OR 7-4 PUMP FAILED
6-2 OR 8-4 PUMP ..... OFF ..... E
6-1 OR 8-3 PUMP ..... ON ..... E

FAILED PUMP ..... OFF ..... E

IF TRIM TRANSFER IS NOT INTO 5 & 7

WHEN THE COLLECTOR TANK APPROACHES LOW LEVEL

APPROPRIATE TANK 6 OR 8 PUMP ... ON ..... E

IF TRIM TRANSFER IS INTO 5 & 7
MANAGE TRIM TRANSFER TO TOP UP AFFECTED COLLECTOR TANKS USING 5 & 7 MAIN INLET VALVES AND COLLECTOR TANK STANDBY INLET VALVES .. E

WHEN TRIM TRANSFER IS COMPLETE

5 & 7 MAIN INLET VALVES ..... AUTO ..... E
COLLECTOR TANK STANDBY
INLET VALVES ..... SHUT ..... E
CROSSFEED ..... AS NECESSARY .. E

END//

DURING STABILIZED CRUISE, DECELERATION OR DESCENT

FAILED PUMP ..... OFF ..... E

IF TRIM TRANSFER IS NOT INTO 5 & 7
CROSSFEED ..... AS NECESSARY .. E

IF TRIM TRANSFER IS INTO 5 & 7
MANAGE TRIM TRANSFER TO TOP UP AFFECTED COLLECTOR TANK USING 5 & 7 MAIN INLET VALVES AND COLLECTOR TANK STANDBY INLET VALVES .. E

WHEN TRIM TRANSFER IS COMPLETE

5 & 7 MAIN INLET VALVES ..... AUTO ..... E
COLLECTOR TANK STANDBY
INLET VALVES ..... SHUT ..... E
CROSSFEED ..... AS NECESSARY .. E

END//

September 2003

Sep 13 — Clinton, OK. Clinton Municipal Airport (CLK). Clinton's Centennial Celebration. Antique airplanes and cars. Contact Tracy Yoder, 580/323-5782

Sep 13 — San Antonio, TX. San Geronimo (8T8). Young Eagles Flight Rally. Young Eagles rally and Pancake Breakfast. Contact Jim McIrvin, 210/275-7780

Sep 13 — Sulphur Springs, TX. Sulphur Springs Municipal Airport (SLR). 8th Annual Fall Fly-In. Activities, vendors, and food. Camping available on site. Contact Roger Elliott, 903/885-7613

Sep 20 — Farmington, NM. Four Corners Regional (FMN). Wings, Wheels and Waves. Static display of cars, boats, and aircraft. Pancake breakfast. Airshow mid-day. Contact Joe Baker, 505/324-0688.

Sep 20 — McGregor, TX. McGregor Executive (PWG). Low & Slow Fly in. All aircraft are invited especially those eligible for Sport Pilot. Free Fish Fry at Noon. Contact Jon Botsford, 254-420-0184

Sep 26 - 28 — Oakdale, LA. Allen Parish Airport (L42). Cajun Fly-In. Fun,Fun,Fun. Camping, Lots of good Food, music, Casino trips from the airport and good fellowship with fellow aviators.. Contact Joel or Carla Johnson, 318-215-0090

Sep 27 — Granbury, TX. Granbury Municipal (F55). Fly-in Breakfast. Contact John Holt, 817/570-8533.

Sep 27 — North Little Rock, AR. North Little Rock Municipal (1M1). Fly, Ride, & Shine EAA Chapter 165. Fly-In Aircraft, Motorcycle & Car Show. Contact Jerry Homsley, 501/517-6210.

Sep 27 - 28 — Midland, TX. Midland International (MAF). FINA-CAF Airshow 2003. 100 Years of Powered Flight. Canadian Snowbirds, B-29 Superfortress, SB2C Helldiver. Gates open 7:30 a.m., airshows at 1 p.m. daily. 915/563-1000.

October 2003

Oct 1 - 4 — Jennings, LA. Jennings (3R7). 24th Annual End of the Season Stearman Fly In. Stearman fly in from multiple areas to join in fun and games. There will be flower bombing, spot landing, and worst landing contests. Parties and dinners too.. Contact Willard Duke / Holiday Inn, 337/588-4015 / 337/824-5280.

Oct 3 - 5 — Oklahoma City, OK. Will Rogers World airport (OKC). Aerospace America International Airshow. 3 day event. Friday night show, all day Sat, Sun. Aerobatic performers, warbirds, fire and fury (modern military. GA Fly-in's Welcome. Great show and fun.. Contact Lois Lawson or Don Schmidt, 405-685-9546;

Oct 4 — Gatesville, TX. Gatesville Airport (05F). Pancake Breakfast. Texas Wing of the Cessna 150/152 Club monthly fly in.,. Contact Gerry Nolan, 254/939-3801

Oct 4 — Granbury, TX. Pecan Plantation (0TX1). EAA Chapter 983 Fall Fly In. 10AM. Lots of planes and free rides. Food and kid's park. Rain date, Oct. 11.. Contact Dave Christman, 817/279-9899

Oct 11 — Seguin, TX. Elm Creek Airpark (0TX6). Annual Fly-In. 10 am to 5 pm Lunch at noon Lat/Long: 29-30-18.835N / 097-59-49.018W Rwy 14/32 (RP Rwy 32) 2200'x80' turf 122.9
http://www.airnav.com/airport/0TX6 .
Contact E Staley, 830/303-6577

Oct 11 - 12 — Eureka Springs, AR. Silver Wings Field. Fly-in/Aviation Cadet Reunion. Contact Errol Severe, 479/253-5008.

Oct 17 - 19 — Gordonville, TX. Cedar Mills Airport (3T0). Cedar Mills 7th Annual Safety Seminar and Splash-In. Seawings & Wings-Participants earn credit towards their SPA-FAA Seawings and Wings awards. Forums-Presented by the FAA, SPA, aviation instructors and representatives of aviation equipment manufacturers and avionics industry. Flying Events-Saturday & Sun. Contact Rich L. Worstell, 903/523-4899

Oct 17 - 19 — Las Cruces, NM. Las Cruces International Airport (LRU). 3rd Annual Land of Enchantment RV Fly-In (LOE3). THE biggest, most hassle-free, gentle pleasures fly-in in the Southern United States for fans of Van's Aircraft RV kitplanes. Aircraft judging by Col. Frank Borman and Ron Karp.. Contact Doug Reeves, 972/317-8543

Oct 17 - 19 — Natchitoches, LA. Natchitoches Louisiana (IER) Flyin. Sponsored by Bellanca owners, open to all. Oldest city in Louisiana Purchase. Tour old plantations, alligator farm, antique shops, historical sites. Discount motel rates. . Contact Peggy Bianchi, 337/238-5428

Oct 17 - 19 — Pineville, LA. Pineville Municipal (2L0). EAA Chapter 614 Annual Fall Fly-In. Camping, Sea-plane landing available in Lake Beulow, Parties nightly. Contact Jim Moody, 318-793-2992

Oct 18 — Carrizo Springs, TX. Dimmit County Airport (CZT). AYA South Central Grumman Fly-In. A nice airport and golf course invite us for the second AYA South Central Golf Tournament. This starts with lunch at the brand new airport cafe, then nine holes. Prizes awarded.. Contact Tom Jackson Jr., 361-228-9008

Oct 25 — Granbury, TX. Granbury Municipal (F55). Fly-in Breakfast. Contact John Holt, 817/570-8533.