## FTW02LA125 PERTINENT MEDICAL RECORDS INFORMATION

SUMMARY: Medical records obtained on the pilot document a history of severe headaches since at least 1992 treated with multiple narcotic medications and anti-migraine medications from several different providers up through the date of the accident. Applications for Airman Medical Certificate submitted to the FAA every 6 months on the pilot during this period notes the use of narcotics only once and, on 6 applications during this time, indicates <u>no</u> history of frequent or severe headaches. Personal medical records indicate that the headaches occurred as often as every day and document the prescription of hundreds of doses of narcotic medications each year from 1993 through the date of the accident. The most recent prescription for narcotic medication and the most recent prescription for anti-migraine medication were filled 3 days prior to the accident.

The following pertinent medical information was extracted by NTSB Medical Officer, Mitchell A. Garber, from the medical records maintained on the pilot by the FAA Civil Aeromedical Institute Aeromedical Certification Division:

2/9/74 to 10/19/92 – written and electronic records of FAA medical examinations performed at least annually indicate no medication use and no history of frequent or severe headaches.

11/17/92 – Letter to the pilot's Aviation Medical Examiner from a neurologist notes:

"IMPRESSION:

1. Muscle contraction headache.

2. Atypical cluster headache.

**RECOMMENDATIONS:** 

1. Observation and reassurance.

2. Headache diet and booklet.

3. MRI scan of the brain.

4. EEG.

5. Return visit in 6 weeks.

6. Anaprox 275 mgs. one or two every 4-6 hours as needed for daytime headache.

7. Bellergal S one at bedtime daily prophylactically for night-

time headache with further recommendations to follow.

... [The pilot]'s had mild headache off and on for some years but over the last few years has gotten increasingly frequent headache. He has two types of headaches. One is a daytime type of headache that's usually bifrontal, occurs without premonition or aura. He can usually feel it coming on and usually if he takes aspirin it will clear in an hour or so without any sequelae. There's no nausea or vomiting with it. An additional headache is a nighttime headache that occurs 2-3 times monthly at times, at other times he'll go a month to 6 weeks without the

headache. He goes to bed without headache. He'll awaken around 1:00 in the morning with a headache that's either right or left sided hemicranial. It's a rather severe headache. He describes it as a 10 on a scale of 1-10. There's nausea and vomiting associated with and nasal stuffiness on the affected side. It lasts a few hours and then clears and is clearly a different type of headache than his daytime headache. The nighttime headache occasionally is triggered during the day though this is somewhat unusual. He has cut out chocolate and alcohol since he has associated these types of headaches with ingestion of alcohol and chocolate ... CURRENT MEDICATIONS: Aspirin for headache. ..."

3/30/93 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17 "Do you currently use any medication ...if yes, give name, purpose, dosage, and frequency," and contains the hand-written notation "Bellergal – occasionally; Darvocet – occasionally." No other medications are noted. The application indicates "yes" for Item 18.a. "Frequent or severe headaches." Under "Explanations" is the notation "occasional headache – relieved easily by medication." Under Item 60 "Comments on History and Findings" is noted "OK'd by [reviewing physician] in Oklahoma City. Reports enclosed, airman told not to take medicine on a continuous basis."

4/30/93 – Letter to the pilot from the Manager of the FAA Aeromedical Certification Division notes "Our review of your medical records has established that you are eligible for a first-class medical certificate. ... At the time of your next Federal Aviation Administration medical examination, please ask your aviation medical examiner to submit with the report of examination a current status report from your treating physician regarding your history of headaches ... Because of your history of headaches, operation of aircraft is prohibited at any time new symptoms or adverse changes occur, for 24 hours after use of medication or if you experience side effects or require a change in medication."

9/21/93 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "no" for Item 17 "Do you currently use any medication" and "yes" for Item 18.a. "Frequent or severe headaches." Under "Explanations" is noted "Food allergy – no further treatment required." Under Item 60 "Comments on History and Findings" is noted "Airman is not being treated for headaches as he has had no further symptoms."

3/21/94 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "no" for Item 17 "Do you currently use any medication" and "no" for Item 18.a. "Frequent or severe headaches."

6/21/94 – Documentation of telephone call from the pilot's aviation medical examiner (AME) indicates that the AME "failed to note follow up requested with this exam, but airman has had no further symptoms and he ([the AME]) doesn't feel any further followup necessary. ..."

6/22/94 – Letter to the pilot from the Manager of the FAA Aeromedical Certification Division notes "Our review of your medical records has established that you are eligible for a first-class medical certificate. … Because of your history of headaches, operation of aircraft is prohibited at any time new symptoms or adverse changes occur, or anytime medication is required."

9/15/94 to 2/6/96 – Applications for 1<sup>st</sup> class Airman Medical Certificate note "no" for Item 17 "Do you currently use any medication" and "no" for Item 18.a. "Frequent or severe headaches."

8/13/96 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17 "Do you currently use any medication ...if yes, give name, purpose, dosage, and frequency," and contains the hand-written notation "Calan SR." No other medications are noted. The application indicates "no" for Item 18.a. "Frequent or severe headaches." Under "Explanations" is the notation "Previously reported. Calan to prevent headaches. Total neurological exam – no cause except allergies." Under Item 60 "Comments on History and Findings" is the notation "Airman has been on Calan for four months as a prophylaxis for headaches (occasional and aggravating – not severe). NO SIDE EFFECTS. Phone consult with Oklahoma City."

9/20/96 – Letter to the pilot from the Acting Manager of the FAA Aeromedical Certification Division notes "Our review of your medical records has established that you are eligible for a first-class medical certificate. … Because of your history of headaches, operation of aircraft is prohibited at any time new symptoms or adverse changes occur, or if you experience side effects or require a change in medication."

2/6/97 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "no" for Item 17 "Do you currently use any medication." The application indicates "no" for Item 18.a. "Frequent or severe headaches." Under Item 60 "Comments on History and Findings" is the notation "Headaches improved – no longer on Calan."

8/18/97 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17 "Do you currently use any medication ...if yes, give name, purpose, dosage, and frequency," and contains the hand-written notation "Imitrex 25 mg." No other medications are noted. The application indicates "no" for Item 18.a. "Frequent or severe headaches." Under "Explanations" is the notation "previously reported. Occasional use of Imitrex secondary to cervical arthralgia."

1/27/98 – Letter to the pilot from the Manager of the FAA Aeromedical Certification Division notes "Our review of your medical records has established that you are eligible for a first-class medical certificate. … Because of your history of headaches, operation of aircraft is prohibited at any time new symptoms or adverse changes occur, for 24 hours after use of medication or any time medication is required on a continuous daily basis." 2/16/98 – Application for 1<sup>st</sup> class Airman Medical Certificate is blank under Item 17 "Do you currently use any medication ...if yes, give name, purpose, dosage, and frequency," and contains the hand-written notation under "Explanations" "previously reported – occasionally taking Imitrex." The application indicates "no" for Item 18.a. "Frequent or severe headaches." Under Item 60 "Comments on History and Findings" is the notation "Airman does not fly when he has headaches. They are not either of sudden onset or debilitating. No side effects from meds."

8/19/98 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17 "Do you currently use any medication ...if yes, give name, purpose, dosage, and frequency," and contains the hand-written notation "Imitrex occasionally for headaches." No other medications are noted. The application indicates "yes" for Item 18.a. "Frequent or severe headaches."

2/22/99 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17 "Do you currently use any medication ...if yes, give name, purpose, dosage, and frequency," and contains the hand-written notation "Imitrex for an occasional headache." No other medications are noted. The application indicates "no" for Item 18.a. "Frequent or severe headaches."

8/11/99 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17 "Do you currently use any medication ...if yes, give name, purpose, dosage, and frequency," and contains the hand-written notation "Imitrex for occasional headache." No other medications are noted. The application indicates "yes" for Item 18.a. "Frequent or severe headaches."

2/8/00 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17a. "Do you currently use any medication ... (if yes, below list medication(s) used...)," and contains the hand-written notation "Imitrex occasional headache," next to which is indicated "yes" under "previously reported." No other medications are noted. The application indicates both "yes" and "no" for Item 18.a. "Frequent or severe headaches."

8/3/00 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17a. "Do you currently use any medication ... (if yes, below list medication(s) used...)," and contains the hand-written notation "Imitrex occasional headache," next to which is indicated "yes" under "previously reported." No other medications are noted. The application is left blank for Item 18.a. "Frequent or severe headaches."

2/13/01 - Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17a. "Do you currently use any medication ... (if yes, below list medication(s) used...)," and contains the hand-written notation "Imitrex occasional headache," next to which is indicated "yes" under "previously reported." No other

medications are noted. The application indicates "no" for 18.a. "Frequent or severe headaches."

8/2/01 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17a. "Do you currently use any medication ... (if yes, below list medication(s) used...)," and contains the hand-written notation "Imitrex occasional headache," next to which is indicated "yes" under "previously reported." No other medications are noted. The application indicates "yes" for 18.a. "Frequent or severe headaches."

2/5/02 – Application for 1<sup>st</sup> class Airman Medical Certificate notes "yes" for Item 17a. "Do you currently use any medication ... (if yes, below list medication(s) used...)," and contains the hand-written notation "Imitrex occasional headache," next to which is indicated "yes" under "previously reported." No other medications are noted. The application indicates "yes" for 18a "Frequent or severe headaches."

The following pertinent medical information was extracted by NTSB Medical Officer, Mitchell A. Garber, from the medical records obtained under subpoena from a physician who treated the pilot between 1991 and 1999:

1/20/91 – Note indicates "sinus headache Darvocet-N 100 #100"
8/8/92 – Note indicates " Darvocet-N 100 # 100"
2/20/93 – Note indicates "Headache Darvocet-N 100/#100 x3"
7/23/93 – Note indicates "Headache Darvocet-N 100 #100 x5"
12/27/93 – Note indicates "Headache Darvocet-N 100 #200"
6/6/94 – Note indicates "Headache Darvocet-N 100 #200"
3/7/95 – Note indicates "Headache Darvocet-N 100 #200"
7/1/95 – Note indicates " Darvocet-N 100 #100"
7/26/95 – Note indicates " Darvocet-N 100 #100"
2/9/96 – Note indicates "Headache Darvocet-N 100 refill 5x"
9/24/96 – Note indicates "Migraine Imitrex 50 mg Darvocet-N 100"
3/25/97 – Note indicates "Sinusitis refill 5 Darvocet-N 100"
7/7/97 – Note indicates "Migraine refill 5 Darvocet-N 100; Percodan 50"

8/19/97 – Note indicates "Migraine Percodan 50"

10/3/97 – Note indicates "Migraine refill 5 Darvocet-N 100; Percodan 50"

11/11/97 - Note indicates "... Headache/stress Percodan 50"

11/24/97 – Note indicates "... Headache/stress Percodan 50"

12/10/97 - Note indicates "... Headache/stress Percodan 50"

1/3/98 - Note indicates "... Darvocet-N 100 # 100"

1/16/98 – Note indicates "... Stress anxiety Percodan 50; Darvon 65 # 100; Restoril 30 ..."

2/2/98 – Note indicates "... Stress/anxiety Percodan # 100 ..."

2/23/98 – Note indicates "Headache Restoril 30 #30 Percodan # 100"

3/16/98 – Note indicates "Headache Percodan # 100 Darvocet-N 100 #100

4/10/98 – Note indicates "Headache Percodan #100"

6/29/98 - Note indicates "Otitis Darvocet-N 100 #100"

- 8/24/98 Note indicates "Headache Darvocet-N 100 #100 Percodan #100"
- 10/26/98 Note indicates "Headache Darvocet-N 100 refill 3"
- 11/25/98 Note indicates "Called in Darvon ... 65 mg"

12/18/98 – Note indicates "Headache Darvon 65 #100"

2/8/99 – Note indicates "Headache Darvon 65 #100 Ambien 10 mg #30"

3/12/99 – Note indicates "Darvon #24"

The following pertinent medical information was extracted by NTSB Medical Officer, Mitchell A. Garber, from the medical records obtained under subpoena from a physician who treated the pilot between 1992 and the date of the accident and from whom most of the prescriptions were filled within the year preceding the accident per the pharmacy records below: 2/13/92 – Physician's note indicates "... has problems with headaches off and on for several years, sometimes 2-3 weeks without one. Sometimes 1-3 per week. With a real bad one he may have some vomiting ..."

10/31/96 – Physician's note indicates "... seen today to recheck on his headaches ... overall he is improving ... still under a fair amount of stress ...

3/31/97 – Physician's note indicates "… really tough past 2 weeks. He'll have a headache almost every day for 3-4 days. … He did have to cancel a flight one day … felt the headache coming on and was concerned that that he'd have to take the shot and feel tired. He feels still wiped out the next day …

3/17/98 – Physician's note indicates "... Having stress ... triggering his headache, and causing him to use up his Vicodin and other med ... he has to go back to flying next week. ..."

5/1/98 – Physician's note indicates "... He's really been taking a lot more med. Has been under a lot of stress. ... hasn't had to fly in about 2 months ... headaches ... more frequent ... assessment: musculoskeletal headache, certainly migraine type headache ... gave 15 Tylox tabs and advised him that he would have to contact me for any more of those. He's gone through a lot of Vicodin rapidly. ... Does have a rather panic about running out of med and being left with the headache without anything to back him up. ..."

6/18/98 – Physician's note indicates "... headaches ... getting worse ... under a lot more stress ... put in a bid for a less stressful position ...Imitrex use is increasing as well as Tylox ..."

11/24/98 – Physician's note indicates "... increasing headaches ... Tylox has definitely made a difference ... tried not to take it when he goes to work and he definitely does not take it when he flies. ... Unfortunately, I think he's using too much med for his occupation and I discussed that with him ..."

6/24/99 – Physical Therapy Initial Evaluation indicates "... patient reports about 4 years ago he had excessive G forces to his neck while flying a military aircraft, however, over the last two weeks has had an increase of headaches to every day ... reports pain is intermittent. He does report waking at night. He reports having a headache in the morning. ... He reports normally having headaches 3 times a week, however, over the last two weeks he stated they have increased to daily, and he reports that cervical motion and stress as increasing his pain. ... No significant past medical history is reported at this time. Medications: Imitrex. Occupational Issues: the patient is a pilot ...

5/23/00 – Physician's note indicates "...headaches are controlled ... still using about two Tylox per day on an average but fortunately not every day and fortunately he's only having to fly about 2 days per month so he doesn't have to take it on days

that he flies ... I cautioned him very, very carefully about taking them within 6 hours of flying. ..."

5/14/01 – Physician's note indicates "...seen today complaining of a migraine headache lasting 3 days. ... He tells me that the Prozac actually made him more anxious and didn't seem to help the headache at all. He still wanted to pursue that course and so we tried him on some Celexa ... He doesn't think he can take it and fly ... I did give him 30 more Tylox and cautioned him about the number he was using and the reason I had declined it last week. ... Apparently about a month from now he has to go back to flying and he'll have to come off the Celexa."

8/14/01 – Physician's note indicates "... trying to cut back on his Tylox and in fact, he is down to using about 30 per month. He says the Ambien continues to make an incredible difference. He did go off of it for a little while, didn't have any withdrawals but just didn't sleep well and had a recurrence of his headache. ... He is back to flying about 2 days per month in addition to his trainer status. ...

9/4/01 – Physician's note indicates "Seen today complaining of much worse headache especially on right side. The last couple of days has had increased stress. ... Headaches are still definitely related to increased stress for him. ... waking up at 2 or 3 am with a headache. Still has the muscle tightness ... Had tried Valium at one time but he doesn't want to be quite that drowsy. ... I did give him 30 Xanax 0.5 mg to take <sup>1</sup>/<sub>2</sub>to 1 every 6 hours. Won't give him any more refills on that. I did go ahead and give him 30 more Tylox ...

10/29/01 – Physician's note indicates "... He has been under a lot of stress as he is an airline pilot and he says they have been on almost continuous duty ...Does tell me that the Xanax makes a big difference as far as preventing the headache ... assessment: ... musculoskeletal headache ... some anxiety ... migraine headache ... insomnia ... Continued Ambien ... refilled his Tylox for severe times. His average is down to just about 1 per day where he was up to almost as high as 4 a day in the past ... I gave him some 2 mg Zanaflex ... we will see if that will work as well as the Xanax."

4/2/02 – Physician's note indicates "Seen today to recheck on his meds. Says the Ambien still is working well for him. He has cut down the Tylox significantly since that period. His biggest complaint is that he has some discomfort in his elbow and wrist starting 2 months ago. ...

The following pertinent medical information was extracted by NTSB Medical Officer, Mitchell A. Garber, from the most recent year of medical records obtained under subpoena from another physician seen by the pilot within a year of the accident:

8/20/01 – Physician's note indicates "Headaches persist – begin with anxiety/stress neck tightness. Good results last year with Xanax 0.5 one to two at bedtime.
Meds: no aspirin, Tylenol, Advil – any over-the-counter. No narcotics.

Prescription Lortab # 24 two days ago via phone – relief ... prescription Xanax 0.5 # 50 one to two at bedtime. ..."

10/20/01 – Physician's note indicates "More difficulty sleeping. Good result with Lortab for rescue of headache. Increase to Xanax 0.5 #65 three at bedtime as needed for sleep. Lortab 5 # 24

2/1/02 – Physician's note indicates "Bilateral wrist/hand pain for 2 months ... wrist/hand strain ... Lortab 5 #24."

The following pertinent medical information was extracted by NTSB Medical Officer, Mitchell A. Garber, from the pilot's pharmacy records obtained from one pharmacy under subpoena:

In the year prior to the accident, prescriptions written by five different providers were filled for the following total amounts of the indicated substances:

Ambien (zolpidem) 10 mg – 450 tablets Tylox (oxycodone/acetaminophen) 5/500 - 300 capsules Percocet (oxycodone/acetaminophen) 10/650 mg - 130 tablets Endocet (oxycodone/acetaminophen) 10/650mg - 90 tablets Oxycodone/acetaminophen (generic) 5mg/500mg - 30 capsules Lortab (hydrocodone/acetaminophen) 7.5/500 – 90 tablets Lortab (hydrocodone/acetaminophen) 5/500 – 72 tablets Ultram (tramadol) 50 mg – 12 tablets Alprazolam (generic) 0.5mg - 195 tablets Chlordiazepoxide (generic) 10 mg - 50 capsulesCyclobenzaprine (generic) 10 mg - 30 tablets Imitrex (sumatriptan) 50 mg – 252 tablets Imitrex (sumatriptan) 6mg/0.5ml syringe kit – 17 kits Celexa (citalopram) 20 mg - 60 tablets Claritin (loratadine) 10 mg – 30 tablets Zocor (simvastatin) 20 mg – 120 tablets Prevacid (lansoprazole) 30 mg - 60 capsules Zestril (lisinopril) 10 mg – 210 tablets

In the 30 days prior to the accident, prescriptions were filled on the following dates for the following substances:

3/28/02: Ambien 10 mg – 30 tablets (from pilot's primary physician) 4/2/02: Zestril 10 mg – 30 tablets (from pilot's primary physician) 4/2/02: Tylox 5/500 – 30 capsules (from pilot's primary physician) 4/15/02: Lortab 7.5/500 – 30 tablets (from pilot's dentist) 4/15/02: Imitrex 50 mg – 18 tablets (from pilot's primary physician)