



DR AHEAD



THE AIR FORCE NAVIGATORS OBSERVERS ASSOCIATION NEWSLETTER

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AFNOA President Jim Hanes (66-13 JC), left, receives the traditional AFNOA sextant from Past President John Bridges (63-19 JC) at the September 2022 Reunion. Photo by Jim Faulkner.

PRESIDENT'S MESSAGE

by Jimmie Hanes, James Connally 66-13

This is one of the most unique memos I'm ever tasked to write. First a belated Thanksgiving greeting to each of you; I hope you were able to fill up with all the Thanksgiving goodies available to you and your families. Secondly a belated Christmas and very Happy New Year. I hope all you asked for was given and we are all looking forward to a great 2023. The reason for the uniqueness to this memo is the fact I'm writing it on December 5th.

Hope this finds you all well and God Bless the US Military and the United States of America. We do need the hand of God as the entire world faces a very precarious future.

NOTAM: DEATHS and CHANGES OF PERSONAL INFORMATION

Report address, cell or land line number, and e-mail changes to: **AFNOA**, 4109 Timberlane, Enid, OK 73703-2825; or to jfaulkner39@suddenlink.net; or call 580-242-0526.

THE 2022 AFNOA REUNION

by James Faulkner, James Connally 64-04

The **AFNOA** biennial reunion was held from 19 to 21 September 2022 at the Embassy Suites by Hilton, in downtown Fort Worth, Texas. We used the Reunion Brat Planners to make the hotel, meal and tour arrangements for this reunion. We had a nice reunion turnout, with over 120 people attending. There were about 45 class members from James Connally (JC), 22 from Harlingen (HA), and 5 from Mather (MA). There are several things we will remember about this reunion. They are, first, we were honored to have Edwin (Bruce) Huber from James Connally Class 53-07 as the senior class attendee at the reunion. Second, the war stories at the reunion seemed to express this thought, "The older we get the BETTER we used to fly!" Third, President Jim Hanes (66-13 JC) managed to get all the meetings done in a timely manner. The reunion officially started on Monday afternoon when many people gathered in the hospitality suite to reunite and talk about their days as a navigator.

Board and Membership Meetings were called to order by President Jim Hanes (66-13 JC) at 0730

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<p align="center">MEMBERSHIP APPLICATION AIR FORCE NAVIGATORS OBSERVERS ASSOCIATION</p>	
Name _____	
Spouse's Name _____	
Address _____	

City _____	
State / 9-digit ZIP _____	
Home Phone _____	
Work Phone _____	
Cell Phone _____	
E-Mail Address _____	
Base Name/Class Number _____	
<p>Make check payable to AFNOA and mail to: Leonard T. Melcher, AFNOA Treasurer 103 Steel Valley Drive Boerne, TX 78006-7019 Telephone: 512-296-5209 e-mail: c5nav@hotmail.com</p>	
<p>Note: AFNOA is an IRS 501(c)(19) non-profit organization. Annual Membership — \$15.00 under age 79 \$50.00 for 4-year membership Age 80 and over — \$35.00 for life</p>	
<p>If you are currently a member, GREAT! Please consider a donation to the operating account. If you are not a current member, please consider joining and giving a donation to the organization. Thank you.</p>	
Membership	\$ _____
Donation to Operating Account	\$ _____
Total Amount Enclosed	\$ _____

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MANUSCRIPTS are welcomed, especially by e-mail (address: sue.curran@att.net) or by submittal to the editor on data CDs, IBM-compatible formats only please. All submissions must include the address/contact of the contributor; no anonymous material will be printed; however, names will be withheld on request. The editor reserves the right to edit submitted articles for reasons of taste, clarity, legal liability, or length. The comments and views herein represent the views of the editor and are not necessarily those of **AFNOA**, Inc. Deadline for the next issue is 15 February 2023.

CHANGE OF ADDRESS: Please report changes of address to: **AFNOA**, Inc., 4109 Timberlane, Enid, OK 73703-2825; jfaulkner39@suddenlink.net; 580-242-0526.

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and 0930 respectively, Tuesday 20 September 2022. More than 50 people attended the membership meeting and listened to reports from the Secretary, Treasurer, Membership Chairman and **DR Ahead** Distributor. The attendees made some suggestions for the board to consider on ways to increase membership above the current 1,545, a slight increase from the 2019 reunion. The average age of **AFNOA** members has increased and is now in the 80s. The Treasurer report from Leonard Melcher indicated we have enough money to last for 6-10 years if dues continue to come in, and no unexpected expenses come up. Jim Faulkner indicated we need some of the younger people to volunteer for leadership positions or we will have to close up in about four years, for many of the board members are in their early 80s. Jim Hanes suggested each person at the meeting contact classmates and tell them about **AFNOA**. If you need updated rosters contact Jim Faulkner. Jim Hanes suggested the next reunion be in Waco, Texas in September 2024. The Waco, Texas location was approved. President Jim Hanes appointed a reunion planning committee of Jim Hanes (66-13 JC), Jim Faulkner (64-04 JC) and Bill Clark (64-18 JC). The current board members will remain in their positions until 2024. See the rear cover of **DR Ahead** for a listing of **AFNOA** board members. Errol Hoberman (60-09 HA) gave a report on actions he and General Don Roth, (56-02 HA), had taken to enhance the **AFNOA**-Combat Systems Officer (CSO) training school interface at NAS Pensacola. The school representative at Pensacola supplies articles about the CSO training program for publication in **DR Ahead**.

After the meeting, some attendees went to the hospitality suite for conversation, snacks and beverages provided by the Reunion Brats. Others went on tours or shopping in the Fort Worth area. On Tuesday evening about 120 attended the social and dinner banquet. President Jimmie Hanes (66-13 JC) opened the meeting with a pledge to the flag and a prayer was given by Chaplain Bob Certain (70-16 MA). A toast was made to the President, those missing in action and to the navigators who have made their last flights. Jim Hanes recognized Major General Bill Treu (59-18 JC) and Edwin (Bruce) Huber from Connally (53-07 JC) for representing the senior class present at the reunion. Bruce was accompanied by four family members. He also recognized James Connally Class 64-18 for having a nice turnout. He then introduced Richard (Dick) Herman (64-02 JC) who spoke to the attendees about some historical events between 1962 and current days. He talked about those noteworthy events, that we all remember. Dick then discussed selected passages from his book, *The Trash Haulers*, which is set in Vietnam. For those who have not read the book, it starts out at 0500 hours in Cam Ranh Bay, South Vietnam. He ended the evening by thanking all for their service to the Air Force and the USA. (NOTE: Reunion photos not in this issue of

Dr Ahead are posted at www.james-connally.org under REUNION PICTURES- AFNOA 2022.)



OBITUARY - GENERAL MCBRIDE

General William V. McBride was born May 25, 1922 in Wampum, PA. He passed away August 26, 2022 in San Antonio, TX.

He served in the U.S. military from 1943-78, achieving the rank of a four-star Air Force general.

He received his high school education from Wampum High School. He later attended Garfield Business Institute, Beaver Falls, PA.

He enlisted in the United States Army Air Corps in 1942 and entered aviation cadet training (Class 43-B/02). He completed navigation training at the Pan American Airways Navigation School, Coral Gables, FL, and graduated as a second lieutenant.

He next attended bombardier school in Carlsbad, NM, and in March 1943 entered combat crew training as a navigator-bombardier in B-26 Marauder aircraft at MacDill Field, FL. In July 1943 he joined the 387th Bombardment Group in the European Theater as squadron/group navigator. He helped plan and flew on many of the important missions in support of the Allied ground forces offensive, including D-Day operations. After World War II, he trained new navigators at Ellington Field, TX, and then helped organize the present Air Force basic training base at Lackland. He attended basic and advanced pilot training at Randolph Air Force Base (AFB), Texas, and Barksdale AFB, LA in 1947-1948 to become a triple-rated officer. In 1950 he attended New York University in New York City. Some of his many military assignments were in weather reconnaissance, air rescue and airlift functions. During the Korean War, he commanded the Second Air Rescue Group in Okinawa and in the Philippines. In 1956-1957, he commanded the Eighth Air Rescue Group at Stead AFB, NV.

Later he commanded the 1608th Air Transport

Group at Charleston AFB, SC. In 1959, General McBride was assigned as a student to the National War College in Washington, D.C. In July 1960, he was assigned to Headquarters United States Air Force, Directorate of Plans. In June 1964, he was selected by Secretary of the Air Force Eugene M. Zuckert to become his military assistant. When Secretary Harold Brown replaced Mr. Zuckert in October 1965, McBride remained as the military assistant where he was called on to advise and assist the secretary and undersecretary on operational, planning and programming matters.

Later he served as Commander of the 437th Military Airlift Wing, Charleston AFB, SC in August 1966. McBride was assigned to Headquarters Military Airlift Command in March 1969 as Deputy Chief of Staff, Materiel; he became Deputy Chief of Staff, Operations, in September 1969, and Chief of Staff, Military Airlift Command, in March 1970. McBride was assigned as Vice Commander in Chief, United States Air Forces in Europe in September 1971. In Sept 1972, he became Commander of Air Training Command. He then became Commander of the Air Force Logistics Command in September 1974. McBride was appointed Vice Chief of Staff of the United States Air Force on September 1, 1975.

Since his military retirement in 1978, General McBride and his wife Kathryn had been residents of San Antonio. He was best known to the business and political community for his service as President of the Greater San Antonio Chamber of Commerce from 1982-1987. He also served as an appointed member of the Texas State Board of Education, Austin, TX for six years plus many other positions in the San Antonio area.

McBride was married to Katherine A. Solsberg for 76 years before her death in 2021. He turned 100 on May 25, 2022 while living at Blue Skies, San Antonio TX. General McBride was a life member of **AFNOA** and had written articles about his navigation days for **DR Ahead**.

NOTAM: EMERGENCY LIST

One of our members has told us that if something should happen to him... he has left a listing of people to be contacted. Great planning! Suggest we all consider putting **AFNOA** on that listing.

NOTAM: DR AHEAD BY INTERNET

Still getting a hard copy of **DR Ahead**? Join the over three hundred members who have elected to receive **DR Ahead** via the internet, thereby helping to ensure the longevity of our association by saving **AFNOA** the postage and printing. Please e-mail to Jim Faulkner at jfaulkner39@suddenlink.net to switch.



IN MEMORIAM

by Jim Faulkner,
James Connally 64-04

Edward "Dennis" Ehrenberger died on September 17, 2022 after a long battle with cancer. Dennis was born May 13, 1940 to Ed and Genevieve Ehrenberger. He was the first of six children. In 1962 he graduated from Allegheny College with a degree in economics and was commissioned a second lieutenant via the Air Force ROTC program.

He attended navigator training in Waco, Texas in Class 63-19.

In May of 1963 he started his flying career as a C-124 navigator at Travis AFB, California. Over the course of the next 22 years, Dennis served as a navigator, instructor navigator and flight examiner navigator in C-124s, C-141s and the new C-5A. His final job was as a Wing Plans Officer.

When he left the Air Force in 1985, Dennis worked in the packaging industry for Brockway Glass and then spent the last 22 years with Mead Packaging as the Director of Sales for the west coast, retiring in 2022. He moved to Sierra Vista, Arizona in 2005 and considered it one of the best decisions the family ever made. As Dennis said, "We have a tremendous group of friends we have cherished over the years. Looking back, it's been a great ride and we can't think of anything else we could have done better during this entire period. But all things come to an end."

He is survived by his wife, Arlene, their combined families of five children, 15 grandchildren and five (going on six) great grandchildren. Dennis was very active in **AFNOA** and served as the Treasurer from 2013 to 2019. He will be missed!

TRIBUTE TO DENNIS EHRENBERGER

Jim, Staff, and **AFNOA** members,

So sorry to hear Dennis has passed. Really sad for his family and for us. Dennis was a great asset in **AFNOA**. Dennis led a full life and shared his intelligence and capabilities with us. I am personally grateful for his good guidance in watching over our **AFNOA** treasury as he did. With sincere well wishes to his family,

Ron Barrett, **AFNOA** Historian, James Connally 63-06



BOOK REVIEW: FIRST CROSSING BY ROBERT O. HARDER

by Ronald P. Barrett, AFNOA Historian
James Connally 63-06

AFNOA member Robert O. Harder has authored a second great navigator's tome that relates once again a bit of flight history well worth reading. Harder's latest book is *"First Crossing, the 1919 Trans-Atlantic Flight of Alcock and Brown,"* ISBN 9781620068762, Published by Sunbury Press, Inc., www.sunburypress.com.

This is a story of how RAF Officers, Pilot Alcock and Navigator Brown, manually flew the Vickers bomber of WWI, called the Vimy, non-stop from Newfoundland in North America eastward across the North Atlantic Ocean to Europe. With modifications to carry lots of gasoline they flew some 17 perilous hours and landed (well, kind of, crashing) in Ireland. And they lived to tell about it!

AFNOA members having real, actual navigator experience, were briefed by their 25-year-old ancient pilot-aircraft commander, sharpened their pencils, planned missions, drew course lines on paper charts, got a weather briefing, filled out celestial precomp forms, checked their optical sextants, stowed their white bread-dried out cheese flight lunches for the 10-hour flight ahead, reviewed with the flight engineer the fuel load, and logged takeoff on the AF Form MAC-25 log. At altitude they got the LORAN pips on the screen, checked the N-1 compass for departure heading, and passed the first of many paper cups of black coffee to the two pilots, who had just opened the Playboy magazines archived beneath their crew seat cushions. Thus the now all-but-gone navigators of today settled down to get their hourly fix, double drift, pressure pattern-wind, LORAN LOP, celestial LOP readings all onto the neatly expanded and neatly configured log-forms. And the many engines of the aircraft hummed on, keeping all comfortable for the oceanic crossing flight ahead. Mostly routine in the day.

We need to remember the facts: every area of flight knowledge was new in 1919, to all involved. The Wright Brothers plus Katharine Wright had produced the first controllable fixed wing flying machine in just Dec 17, 1903. In 1919, the airplane now had 400 HP engines (ten times the Wright brothers' engine power) and were multi-missioned (observation, fighter, cargo and bombers). The planes were conglomerates of wood, cloth coverings, unknown fuels and oils, and wires and levers. Cockpit instruments were at best minimal. Reference the cockpit (layout) picture on page 46. The pilot and navigator sat shoulder against shoulder! Seventeen hours! On a bench seat! Ouch!

The "new" technologies were introduced and totally new flight operations were created on the fly. Harder's use of related pictures really aids in conveying

what was happening both in the technical arena as well as the human interactions of the navigator and pilot.

The factual inclusions of the lives of those involved is well presented in the picture on page 212 of the garden party at Commander Trevor Dawson's (Director of Armaments for Vickers) home where Mrs. Douglas Vickers is speaking with the wife of navigator Brown, Kay Kennedy. Navigator Brown and wife-to-be Marguerite Kathleen Kennedy had intentionally held off until after the trans-Atlantic flight to get married, which they did. The flight was June 14-15, 1919. The marriage was July 29, 1919.

Harder's reflections on the interface of our navigator technologies with our human lives is well done, as is this history-laden tale, and one many of us in **AFNOA** have shared.

Thank you, **AFNOA** member Robert O. Harder.

CROSSROADS AT KADENA

by Murray Siegel, Ph.D., James Connally 65-03

Kadena AB on Okinawa was one of three bases used to launch B-52 Arc Light bombing missions during the Vietnam War. I was there during the summer and fall of 1968 and thought Kadena was the best of the three. It had three television stations (one was in English), and a wonderful base library. Out the back gate was Koza City, with restaurants, shops and various entertainment venues. If you left a pair of shoes or boots and some dirty clothing by your VOQ door at night, in the morning the shoes/boots were polished and the clothes had been laundered.

I came to believe that Kadena was a crossroads where I would meet people I never expected to see again. There were two events that contributed to this belief. I was attending a worship service at the base chapel when a young man tapped me on the shoulder and asked if I had gone to PS147. In New York City, elementary schools were numbered with a "PS," standing for public school, in front of the number. I told him that I attended PS177 and asked him why he had asked. He pointed to his wife who thought she knew me. She was Helen, who had been in my class for second through fifth grades. We had worked together on a number of Social Studies group reports in fifth grade, but her family had moved away at the end of that school year. Now, fifteen years late and halfway around the world, there she was.

The second event began at the beginning of the year while I was still stationed at Griffiss AFB. A new lieutenant arrived as a maintenance officer and I befriended him. My wife and I invited him for dinner, but shortly thereafter I was transferred to Columbus AFB

and then to Arc Light. Subsequent to landing at Kadena after a mission, our crew loaded onto a crew bus and were joined by a crew from Westover AFB. Their gunner had the same last name as that young lieutenant, so I asked him if they were related. He was the gunner's nephew.

Later that evening, I was entering the Officers' Club for dinner, when exiting the club was the young maintenance officer. I asked if he knew that his uncle was at Kadena, and he did not. He quickly scurried off to find his uncle. How miniscule was the probability of this sequence of events happening?

I became convinced that if I stayed long enough at Kadena I would meet a crowd of folks from my past. In October, I returned to the mainland and have never been back to Okinawa. Had I stayed at Kadena for another twenty years, I would have met my future daughter-in-law who was a dependent there. There is no question that Kadena was the crossroads of the world.

FROM THE TREASURER

by Leonard Melcher, Mather 74-18

AFNOA greatly appreciates the donations to the operating fund from the following members:

\$500: Michael Clarke, (Harlingen 60-10)

\$200: Francis Gawell (Harlingen 60-19)

\$100: Craig Hinton (Harlingen 53-12)

I'm looking for navigators who participated in the 1973 Airlift Israel. Please contact Leonard Melcher (c5nav@hotmail.com – 512.296.5209). I am trying to get an article done for **DR Ahead**. I will write it, if I can get the information for it.

If a member of **AFNOA** is planning to travel to Germany or Europe in the near future, please contact Leonard Melcher (AFNOA Treasurer) at 512.296.5209.

NOTAM: DR Ahead Distribution

AFNOA members who are current on dues should receive the e-mail copy of **DR Ahead** by the 7th of the published month (January, April, July or October) or the paper copy via USPS by the 25th of the published month. IF NOT RECEIVED, contact Jim Faulkner (jfaulkner39@suddenlink.net) or Errol Hoberman (afnoa.distributor@yahoo.com). Note that e-mail copies may sometimes go into the "spam" or "junk mail" folders so please check them before contacting **AFNOA** representatives.

TACTICAL DEPARTURE RIYAH

by Bob Johnson, Mather 78-20

When the ground war started for Desert Storm, my RC-135 crew was tasked to replace an RC-135 on station along the Iraq border. We were taking off at night from Riyadh. The whole process of preflight, start engines, taxi, and takeoff were all to be accomplished under EMCON conditions, meaning without any radio communications; done on prearranged times and ground interphone with the crew chief. Additionally, we were directed to taxi and takeoff without the aircraft navigation lights illuminated (wingtip, rotating beacons, strobes, or landing lights) so no one could see the aircraft movement at night and possibly target us during takeoff. They seriously thought an Iraqi sympathizer might target us.

As a crew, we checked the chart obstacle elevations to the northwest of Riyadh and decided to add an ad-hoc "tactical departure" maneuver to our takeoff by turning off runway heading as soon as possible and accelerating to 300 knots (this is war after all) before starting our climb. With an airfield elevation of about 2,100 feet and nothing much to the northwest of Runway 01, we decided on a 300 foot climb to roughly 2,400 feet, turn left to heading 320 degrees (to stay away from King Khalid airport to the north), clean up the aircraft as we accelerate to 300 knots, and then exchange a lot of airspeed to zoom up to altitude. We would just be a big noise going past rapidly in the dark sky.

In the dark, we accomplished the EMCON preflight, taxi, takeoff, our "tactical departure" and screamed across the city outskirts heading 320 at 2,400 feet as the lights passed under us until we got to 300 knots to zoom up for our 12-hour mission. Worked well!

A few days later, we were tasked to fly again and to do the same EMCON procedure profile, except during daylight hours. We taxied, lined up, and took off. We accomplished the same "tactical departure" heading 320 at 2,400 feet. However, in daylight, the 300 foot altitude pad we used during the night departure sure made some structures look closer than we expected as we accelerated to 300 knots. Low-level, high speed is not a typical picture we'd see thru the windshield of an RC-135! It sent a shiver down my spine! Not only were we uncomfortable, but I'm sure we scared the hell out of anyone under our flight path the earlier evening and today as the big noise flew by!

Since this was our "tactical departure," we decided to increase our left turn altitude to 2,600 feet on any subsequent flights. However, the ground war ended, they stopped the EMCON procedures and we never used our ad-hoc "tactical departure" again.



2022 AFNOA REUNION PICTURES
LOOK FOR MORE PHOTOS ON PAGES 10 & 11
AND ON THE JAMES CONNALLY WEBSITE
at www.james-connally.org under REUNION PICTURES- AFNOA 2022
PHOTOS BY JIM FAULKNER, 64-04 JC



Hoot Hollrah (61-02 JC) and Christine.



Jim Faulkner (64-04 JC); Jim Hanes (66-13 JC); Leonard Melcher (74-18 MA); Don Crusius (64-02 JC).



Bob Frazier (59-18 JC); Joe Lee (64-08 JC); Dixie Howell (59-18 JC).



Jim Colligan (66-12 JC); Al Pianalto (64-10 JC); Joe Lee (64-08 JC).



Arthur Duston (63-21 JC) and Kathy.



Alvin Bird (64-18 JC) and Kathy Devore.

Below:

**Walt Archey (66-12 JC);
 Stu Freigy (64-08 JC).**



THE STORY BEHIND THE STAR CHARTS

by Pete Cook, James Connally 64-10

Shooting the stars was a skill we earlier navigators were good at. Today's CSOs don't get the satisfaction of plotting a perfect 3-star fix on a nav chart. Some were not even born when sextants began disappearing from airplanes!

The hardest part of getting a good star shot was identifying the correct star. Air Force Manual 51-40, Air Navigation Vol III, contained simple drawings of 35 of the 42 navigational stars. Figure 1 shows the illustration for the star Dubhe. You may remember Dubhe, it was the one that was easy to find at the lip of the Big Dipper. The joke during night cel classes at James Connally was that you could get a quick fix by using Deneb, Dubhe, and Dallas! The 51-40 drawings could be difficult to correlate with what you saw in the sextant, though, because the constellations would rotate from what the pictures showed, depending on time of night and season of year. And there would be lots more stars visible in the sextant that were not shown in the drawings.

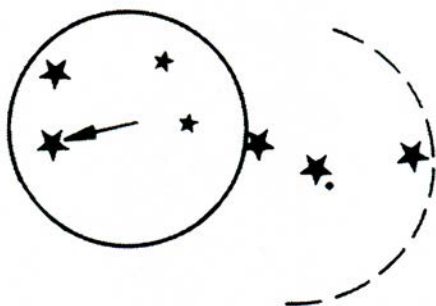


Fig. 1. The graphic for navigational star Dubhe, as it appeared in AFM 51-40, Air Navigation, Vol III.

I was a young captain B-52G EWO at Plattsburgh AFB in 1967. During night celestial legs, the nav would give me the names of three stars to shoot, along with their azimuth and elevation. I had to find each star in the allotted time, record its altitude, then pass that number back to the nav who would plot a line of position (LOP) on his chart. Three LOPs produced a triangle with our fix in the center. I would try my darndest to find my assigned stars. Some were easy, some were not. Sometimes it was nearly impossible to know if you were shooting the correct star, and I wished there was a better way to identify them.

So, when I was assigned to a SAC Bomb Comp crew in 1967, I set about doing just that. It would be a huge help just knowing what the constellations looked like as they rotated through the night, and from season to season. As it turned out, this rotation could easily be determined just by knowing the Local Hour Angle (LHA)

of Aries, which the nav could provide from his precomp sheet. This number would apply to all three stars in the sequence.

But finding those rotation angles initially was not a trivial task. It required solving oblique spherical geometry equations to find the dimensions of an astronomical triangle consisting of the co-declination of the star between the pole and the celestial equator, the co-altitude of the star between the zenith and the horizon, and the co-latitude between the pole and the zenith along the observed meridian.

With trig tables in hand, I spent many days cranking out calculations on an adding machine rented from the Sears store in Plattsburgh, NY. I then drew charts for all 42 stars using a pen-and-ink drafting set, and included first through fourth magnitude stars. Rotation tables were typed on a typewriter, with dashes indicating when the star was below the horizon. All of this would have been way faster and easier using today's desktop computers!

Figure 2 shows what the new chart for Dubhe looked like, and Figure 3 shows its rotation table. By entering the table with the current latitude and LHA of Aries, you could tell how much to rotate the chart to see what the constellation actually looked like.

I sent the charts to *The Navigator* magazine in September 1967. Two years later they published them in an article titled "Star Identification." This soon became a high-demand item, and the article was published again in 1976, 1981, and 1986.

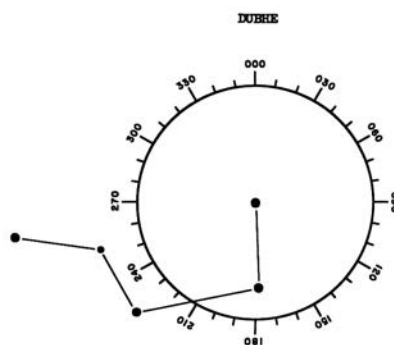


Fig. 2. The chart for Dubhe as it appeared in *The Navigator* magazine.

The charts are still accurate today. I tested this by viewing Dubhe in Phoenix on 1 May at 9 p.m. (Zulu time 2 May at 4 a.m.) Phoenix is at latitude 33 N. The LHA of Aries was 168, found by subtracting the Phoenix longitude, 112 W, from the Greenwich Hour Angle (GHA) of Aries, 280. The GHA can be found online in the Nautical Almanac (formerly Air Almanac) at:

thenauticalalmanac.com/TNACompact/2022_Nautical_Almanac_compact_version.pdf

Entering the Dubhe rotation table with the nearest latitude and LHA gave a rotation angle of 202. This could be interpolated for a more accurate angle, but that was close enough. I rotated the chart to that angle and sure enough, that's how Dubhe appeared in the night sky. You can test this for yourself at your own location by entering similar information.

DUBHE

LHA LAT	0	30	60	90	120	150	180	210	240	270	300	330
80N	004	012	018	021	019	008	353	741	339	342	348	356
70N	007	020	032	042	047	032	330	313	318	328	339	352
60N	008	026	043	059	075	097	260	284	300	316	333	351
50N	009	030	050	070	095	136	219	264	288	309	328	348
40N	011	034	057	079	107	149	208	251	279	302	325	348
30N	012	037	062	087	115	154	202	243	271	297	320	346
20N	-	-	067	092	121	158	199	236	266	292	318	-
10N	-	-	-	071	098	126	160	198	232	260	287	-
0	-	-	-	-	103	131	162	196	228	255	-	-
10S	-	-	-	-	134	164	195	224	-	-	-	-
20S	-	-	-	-	138	165	193	221	-	-	-	-
30S	-	-	-	-	-	-	-	-	-	-	-	-
40S	-	-	-	-	-	-	-	-	-	-	-	-
50S	-	-	-	-	-	-	-	-	-	-	-	-
60S	-	-	-	-	-	-	-	-	-	-	-	-
70S	-	-	-	-	-	-	-	-	-	-	-	-
80S	-	-	-	-	-	-	-	-	-	-	-	-

Fig. 3. The rotation table for Dubhe as it appeared in *The Navigator* magazine.

At Plattsburgh I was only able to use the charts for a few months, then never used them again. Bomb Comp was canceled that year, and I was assigned to a Wild Weasel crew shortly thereafter. There was no sextant in the F-105! Then it was off to UPT, never to serve as a navigator again.

After retiring as a Lt Col in 1986, I received a call from associate editor Patricia Palmer of *The Navigator* saying they were printing my article one last time in the Fall 1986 issue. That was the final issue of the magazine. They closed the office afterward, and she became Asst Manager of the Mather NCO Club.

An earlier letter from editor Walter Woodruff said mine was the most-often-reprinted article ever published in the magazine. It had been requested by squadrons around the country for their training programs, and was even used in the UNT program. But then GPS came along, and sextants were relegated to history.

I never heard from any of my fellow navs saying whether they were actually able to use the charts.

NOTAM: LOCATING AFNOA MEMBERS:

HELP NEEDED—Would you like to help us find relocated **AFNOA** members who forget to advise us when they move or change their phone/email address? Each month John Fradella (James Connally 66-17) and I spend MANY hours trying to find people when the mail is returned, or email/phone are no longer operational. If you would like to help us several hours a week—please contact Jim Faulkner (James Connally 64-04) (jfaulkner39@hotmail.com).

RETURN FROM CAM RANH BAY

by Anthony F. Mournian, James Connally 66-07

Most westbound Travis AFB C-141 missions terminated at Saigon, Cam Ranh Bay or Da Nang. It was war, so as we pulled into a parking space, things would happen fast. An army of trucks, buses and unloading equipment would descend on the plane, intent on offloading our cargo at breakneck speed. Most landings were in darkness. A silver C-141 was a large target and fair bait for small rockets or rifle fire. The goal was to get on the ground, drop the load as quickly as possible, and leave posthaste.

Unloading and loading was the job of the Loadmaster, usually a young Airman 2d or 1st class who was eager to make a name for himself. "Load" knew his job. He would be on the ground outside the large clamshell doors before the whine of the four Pratt & Whitney TF33 turbofan engines wound down. "Load" would call in a 463L pallet loader, line it up with the aircraft ramp and begin muscling pallets onto the loader.

While "Load" was busy emptying the cargo bay, the A/C, Co-Pilot and Navigator climbed into a crew bus or deep blue Dodge Six Pack and headed for the Airlift Command Post for a weather briefing and flight plan. After a quick review of the route north to Yokota Air Base, Japan, or east back to Clark Air Base, Philippines, it was back to the flight line to begin the Start Engine Checklist and to prepare for takeoff. "Co-Pilot" would call the tower for taxi and takeoff instructions. If we left from Da Nang, "Tower" would read departure instructions at 350 words per minute. Woe to the Co-Pilot who didn't know the instructions by heart because no matter how many times "Tower" repeated them, it was impossible to write more than a few words of what he had said.

"Load" was in the back, scrambling to tie down the cargo. Out of Cam Ranh Bay it was often a "Med Evac" of 80 wounded soldiers belted into rear facing passenger seats, or strapped down on wall and ceiling mounted litters for more seriously wounded soldiers. From Saigon or Da Nang our cargo was battered or broken men or equipment on the way back to the CONUS for repair and rehabilitation.

The load eastbound was always lighter than the load westbound. Bombs and bullets, trucks and tanks weigh much more than wounded soldiers or dilapidated equipment. A lighter load meant a greater range than the 3,000 miles westbound. This became important on the leg from Yokota to Travis or other west coast destinations such as McChord, Norton or March AFB, all over 5,000 miles across open ocean. With a manifest of napalm serious burn victims, we needed every mile of 5,500 miles nonstop to reach the burn center at Brooks AFB, San Antonio, Texas.

One of those Med Evac missions in June, 1968 is especially vivid in memory. We left Travis on June 3 and worked our way west with crew rest at Wake Island

and Clark Air Base before going “in country” to deliver our cargo and pick up an Air Evac bound for Yokota. Weather was crappy. A “day ahead,” it was already June 6, 1968 in the eastern hemisphere and the monsoon season. With the monsoon came pounding rain and a bumpy ride. The bumpy ride was a concern for our wounded because it added to their misery even if they were “going home.”

Takeoff was around noon with a typhoon spinning somewhere northwest off Okinawa. We climbed to Flight Level 290, thinking it might be above the weather. No dice, it was rough and bumpy, and it was going to stay that way for most of the 2,500-mile flight to Yokota.



Lockheed Starlifter 63-8088, aka the Golden Bear, on Static Display at Travis AFB after an upgrade to C-141-C, and following retirement in 2006. Photo provided by Anthony Mournian.

I sat at my work table watching the Iso Echo on the APN-59 Search and Weather Radar. The A/C dodged left and right to go around the biggest weather cells, climbing first to FL 330, then to FL 370. There was no getting around it. We were stuck with lumpy and bumpy for the duration. Reception from Armed Forces Radio was scratchy and broken. Then, around noon somewhere out over the Philippine Sea the announcer broke in over Petula Clark singing “Downtown.”

The announcer described the pandemonium in Los Angeles, California, where it was just after midnight on June 5, 1968. The Democratic Presidential Primary was winding up, with Walter Cronkite and the television networks calling California for Senator Robert F. Kennedy. It was time for a tired and jubilant victory party to be put to bed. Senator Kennedy made his way from the ballroom of the Ambassador Hotel down a hallway toward the kitchen. Shortly after midnight, surrounded by staff and party faithful, Kennedy was working his way out through the kitchen to a waiting limousine when a young Sirhan Sirhan stepped in front of him, raised a revolver and pulled the trigger, emptying his gun. Kennedy fell to the floor, where a bus boy, Juan Romero, who was shaking Kennedy’s hand at the moment of the attack, dropped to the floor and held Kennedy’s head, an image caught forever on film by Boris Yaro of the Los Angeles Times.

Senator Kennedy lived a day, dying at 1 a.m. on June 6, 1968. His death was the fourth in a series of assassinations in the 1960s, and followed the death of his brother, President John F. Kennedy on November 22, 1963. Robert Kennedy’s death was two months after Martin Luther King was gunned down on the balcony of the Lorraine Hotel in Memphis, Tennessee on April 4, 1968.

We flew north and began our descent over Ōshima, a small island off the southern tip of Honshu, about 70 miles south of Mt. Fuji and Yokota Air Base. The descent from 37,000 feet to Yokota at 1,500 feet AGL was a wild ride in rain, bouncing all the way. It was the end of a tiring and emotional day and one I was glad to put behind me.

**2022 AFNOA REUNION PICTURES
CONTINUED FROM PAGE 7
PHOTOS BY JIM FAULKNER, 64-04 JC**



Jack Holstein, Richard Herman and Don Crusius (64-02 JC).



Jack O'Connor (61-14 HA) and Kathleen Garringer.



Garey Reeves (57-07 HA) and Jan.



General Bill Treu (59-18 JC) and Mary.



**Tom Kawamoto (64-04 JC) and Rosemary.
Longest Travelers - came from Hawaii.**



**Ted Koscheski (66-17) and Bruce Huber (53-07 JC).
Bruce represented the most senior class at the reunion.**



Gene Jensen (64-18 JC) and Sami.



Leon Poteet (65-08 JC) and Mimi.



Errol Hoberman (60-09 HA) and Susan Curran.



Al Pringle (60-17 HA) and Shirley Dodson.



Dave Morris (64-18 JC) and Sally.

A BOB HOPE TRIP, 1962

by Jim Stark, Harlingen 61-18

It's impossible after all these long years to know how it happened but, as a fairly junior 2d Lt navigator in the 44th Military Air Transport Squadron, I was picked to be one of the navigators on the mission that transported Bob Hope and his entourage to the Far East in December of 1962.

The orders published by the 44th ATS, Travis AFB, CA on 17 December 1962 included Maj Thomas Poulos, Aircraft Commander; Capt James Brown, Pilot; Captain Terry Martin, Copilot; Maj Lawrence Connors, Nav; 2Lt James Stark, Nav; TSgt Francis Dixon, FET; TSgt Burl Dudley, FTS; and SSgt Wayne Wood, LM.

We departed Travis AFB on 18 December 1962 at 0930 local time in one of the new MATS (Military Air Transport Service) C-135B fanjet aircraft. We arrived at Los Angeles (LAX) at 1040. We stayed overnight at a motel and were back at LAX early on 19 December in anticipation of the arrival of Mr. Hope and his group. Three things come to mind about that departure: It was the first, and last, time I ever flew in a Class A uniform and it was very warm on the ramp that morning. Most of the entourage was late in arriving, particularly Anita Bryant, and they had an endless amount of baggage and packages to be loaded. We finally were airborne at 0940, landing in Honolulu at 1340. Mr. Hope had been invited to a VIP luncheon but returned in time for a 1550 departure.

The flight to Japan was long with substantial headwinds, taking 9 hours and 50 minutes. I was at the nav desk as we were approaching Midway Island where, having been briefed by the pilots, Mr. Hope, sitting in the aircraft commander's seat, made the obligatory radio call to Midway Radio. He started with the routine identification but after the Midway radioman responded, all semblance of radio protocol or position reporting disappeared. Mr. Hope asked the radioman if he knew who he was talking to and then identified himself as Bob Hope. The radioman, obviously caught off guard, responded, "Naw!" When Mr. Hope persisted, the radioman asked him to standby and a couple of minutes later a different voice came on the air, indicating it was the Commanding Officer of Midway. Mr. Hope offered to do an impromptu "Radio Show" and the CO asked if he could turn on the island's PA system for everyone to hear. That done, Mr. Hope and Anita Bryant proceeded to put on a 20-30 minute show with Ms. Bryant playing the straight for Mr. Hope; then she closed with two or three unaccompanied songs—an amazing feat through aircraft headsets. As we coasted out of range Mr. Hope closed with Midway and, as I recall, we never really gave our position report.

After crossing the International Date Line, we landed at Tokyo International Airport at 2040 on 20 December 1962, debarked the whole group, and flew on to

Yokota AB for our crew rest. It had been a long but very exciting day. Another of our crews brought them back from Guam in early January.

BERMUDA TRIANGLE?

by Woody Woodhull, Ellington 54-12C

One night, too late, on an alert aircraft, we ended up at Eglin AFB for whatever reason we would find out. We, KC-97 53-3316 (100th ARS) finally took off to Kindley (Bermuda). Once again all we knew was we were to refuel a B-47 (VIP) going somewhere.

Unfortunately, that night the weather was solid IFR the whole way with no chance for celestial and no LORAN coverage. DR navigation and a hopefully accurate winds aloft were all there was to work with. At our ETA we could not even reach Kindley approach and, frankly, had a pretty big problem.

Help came as the overcast dissipated and I got a three-star fix showing us 150 nm NE of Bermuda, and we got there for breakfast.

There is no way a KC-97 could go that fast. Bermuda Triangle?



The crew of KC-97G #53-3316, from right to left: Capt Jim Barrie (B-24 pilot from WWII); Capt Jack Yale (West Point); Capt Woody Woodhull (Ellington 54-12C); Flight Engineer MSgt Cal Locklear; Boomer SSgt Tommy Thompson, and a radio op along for the ride on this mission (Operation POWER FLITE). Photo provided by Woody Woodhull.

This was my crew; this image was taken at Wheelus AFB, Tripoli, Libya. Uniforms: These were the early days of SAC and the 100th ARS and not a lot of attention was paid to flightline dress. When we left on this TDY we were going to Thule and didn't have warm weather gear. This was our aircraft and we put around 2,000 hrs on it, having picked it up new at Boeing in 1955. It was flown to the bone yard in 1965.



LETTERS

To: Editor, DR Ahead, 5 Oct 2022

Years ago I was working at SA-ALC (Kelly AFB) when ATC announced a contest to name the Boeing T-43A aircraft. I submitted three entries: *Stratonavigator*, *Pathfinder*, and *Vega*.

The *Stratonavigator* was in keeping with *Stratofortress*, *Stratotanker*, etc. I submitted *Vega* due to its celestial coordinates being so close to Mather AFB's geographical coordinates. I mentioned that Lockheed would have to grant permission to use *Vega* as they had produced a *Vega* years earlier.

After about a year, I called Randolph public relations to ask about the contest. I was told that the ATC commander, Gen Iosue, did not like any of the entries.

Maybe some **AFNOA** members who were assigned to Mather back then could shed some light on why the T-43A was never named.

Morris Baxter, Ellington 55-15

Editor, *DR Ahead*,

16 Oct 2022

Hi Susan,

Jim Faulkner suggested I contact you for help. I am part of the restoration crew at Air Mobility Command (AMC) Museum, Dover, DE. We are currently restoring C-119B/C 48-352, the last of the C-119B/C aircraft that dropped bridges to the marines at the Chosen Res on 7-9 Dec 1950 to allow their escape from Communist Chinese. My role is to identify nav equipment used in this aircraft and to try to locate.

Would you please broadcast to the nav community that I am looking for navs who have flown these models to educate me on which equipment they remember at the nav position and particularly if they have any photos of the nav position. Examples I hope to hear about are pressure pattern over water (scr718 absolute altimeter), celestial equipment such as the astro compass, ma2 handheld sextant, drift meters, etc. and what the position looked like.

You have my e-mail (133flyboy@comcast.net); here is my cell phone for texting/calls (302 462-7096). My thanks to Ron B. and Jim F for their help.

And thanks for your assistance,

Dick Marks, James Connally, 64-11

NOTAM: ELECTRONIC ROSTER

We no longer print and distribute an **AFNOA** roster. Electronic copies are available in Microsoft Excel. E-mail Jim Faulkner at jfaulkner39@suddenlink.net for a roster.

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LAST FLIGHTS

by Jim Faulkner, James Connally 64-04

Please advise **AFNOA** membership (jfaulkner39@suddenlink.net) when a navigator/ observer/ bombardier/EWO or combat systems officer has made their last flight. Thanks to the following for reporting multiple Last Flights this quarter: John Fradella, JC 66-17; Bill Wilkins, Ellington 52-09; David Sanford, JC 65-13, plus others who provided names.

Please keep the "Last Flight" families in your prayers. Listed below are the Last Flights reported this quarter.

CORAL GABLES

McBride, William V., Gen San Antonio TX 43-01

ELLINGTON

Schlener, Harold E.	East Meadow	NY	44-53
Drace, James T.	Redlands	CA	45-04N
Fenger, Peter F.	Hamburg	NY	45-04N
Jarvis, Kenneth A.	Auburn	WA	45-04N
Skinner, Benjamin F.	San Bernardino	CA	45-04N
Brownlee, Jack	Issaquah	WA	45-08
Elkind, Martin	Palm Beach	FL	45-08
Hart, Donald H.	Ilowaco	WA	45-08
Mengle, Harold J.	Snyder	NY	45-08
Sabin, Gerald A.	Orlando	FL	45-08
Sutten, Gerald A.	Rock Island	IL	45-08
Zamudio, Humberto	Tucson	AZ	45-08
Jennings, Eugene M.	San Marcos	TX	45-525
Klein, Bernard B.	Orlando	FL	50-00
Mather, John L.	Villanova	PA	51-00
Adams, Alison T.	Williamsburg	KY	53-00
Josephson, Kent A.	Los Gatos	CA	53-00
Sparkman, Jerry D.	McQueeney	TX	54-00
Timmons Jr., Lloyd S.	Brookings	OR	54-19

HARLINGEN

Daniel, James P.	Oklahoma City	OK	53-17
Devoney, Calvin D.	Unknown	FL	53-19
Nystrom, Donald N.	Lady Lake	FL	53-19
Rothacker, Robert F.	Alden	PA	53-19
Warnock, Gerald A.	Hampton	VA	53-19
Mach, Franklin C.	Anderson	SC	56-02
Stoffel, Francis B.	Lansdale	PA	56-02
Weber, Lee E.	Mesa	AZ	56-02
Bender, Ronald L.	Cape Coral	FL	56-18
Abraham, Leo A.	Stillwater	MN	56-20

Wells, Max W.	Dallas	TX	57-07
Callis, David M.	Goldsboro	NC	58-02N
Andre Jr., Howard V.	Memphis	TN	58-13
Armstrong, Frederic C.	Hampton	NH	58-13
Batz, Thomas E.	Unknown		58-13
Bee Jr., Gerald H.	Tampa	FL	58-13
Blair, Paul E.	Fort Worth	TX	58-13
Clark, Franklin D.	Unknown		58-13
Ewald, Clarence J.	Melbourne	FL	58-13
Gerred, Donald L.	Lexington Park	MD	58-13
Giavasis, George P.	Bethesda	MD	58-13
Gleneck, Norman T.	Kenvil	NJ	58-13
Gober, Paul D.	Sumter	SC	58-13
Gomola, Stephen T.	Reynoldsville	PA	58-13
Kunz, Donald A.	Norman	OK	58-13
McCoy, Donald G.	San Antonio	TX	58-13
McMaron, Robert J.	Athens	TX	58-13
Monto, Olger V.	Biloxi	MS	58-13
Prather, Vernon L.	Fort Worth	TX	58-13
Prudot, Elmer J.	Dunfries	VA	58-13
Slaughter, Kent W.	Ramey AFB	PR	58-13
Taylor, Thomas J.	Sumter	SC	58-13
Watcher, Pete P.	Sumter	SC	58-13
Wiesnauer, Robert F.	Leominster	MA	58-13
Freeland, John F.	Fort Collins	CO	59-05
Kahle Jr., Melvin W.	Wheeling	WV	59-05
Salvato, Albert C.	Kissimmee	FL	59-05
Sharland, Robert L.	Negaunee	MI	59-05
Watson Jr., Perry V.	Monroe	LA	59-05
Chick, Jason I.	Springfield	VA	59-06
Schlosser, Robert E.	Midland	MI	59-06
Nash, Charles P.	Davis	CA	59-10
McDowell Jr., James R.	Tucson	AZ	59-15
Meade, Terry R.	Montgomery	OH	59-21
Buckenmyer, David W.	Gilbert	AZ	60-02
Dohrse, Michael E.	Buchanan Dam	TX	60-05
Medlock Jr., Charles	Clarksville	GA	60-11
Fox, Dell H.	York	ME	60-14
VanAllen, Douglas F.	Monument	CO	60-18
Costley, Roy L.	Albuquerque	NM	60-19
Harris, Ronald G.	Romance	AR	61-01
Brandon, Jerry A.	Kalkaska	MI	61-04
Masino, Thomas R.	Dover	DE	61-04

Smith, Charles D.	St. Louis	MO	61-04	SELMAN			
Weiss, Jerold L.	Summerville	SC	61-10	Rothe, Clarence H.	Forest	VA	44-14
Gray, John W.	Rusk	TX	61-13	Harris, William A.	Branson	MO	45-03N
Moore, Jimmie L.	Arlington	TX	61-13	McGuffee, Horace B.	Lodi	CA	45-03N
Smith, William R.	Clearwater	FL	61-13	Dellapa, Arthur A.	Valatie	NY	45-07
Brozovsky, David A.	Vancouver	WA	61-15	Dann, Edward P.	Westchester	IL	45-07N
Reiners, Stanley J.	Lawrence	KS	61-22	Paterson III, William J.	New Bern	NC	45-07N
Billotte, Robert A.	Yuba City	CA	62-19	Shambarger, Charles J.	Lyons	OH	45-07N
HONDO				Wright, Joseph	Diamond Head	MS	45-07N
Miller, George E.	Lakewood	FL	45-415	Borer, Charles D.	Sebastain	FL	45-11
JAMES CONNALLY				Liddle, Wylan	Fayetteville	NY	45-11N
Reinking, Robert G.	Santa Rosa	CA	52-07	McComs, John W.	Brandon	MS	45-11N
Gavin, Bernerd W.	Philadelphia	PA	54-16	Wilson, Elwyn C.	St. Peters	MO	45-11N
Needleman, Joel M.	Corpus Christi	TX	56-02	Palm, James E.	Loman	MN	45-125N
Way Jr., Clifford D.	Dallas	TX	56-02	Hopson, Norman F.	Rexford	NY	45-14
Probst, Wayne W.	Midway	UT	56-05	Martin, Grover A.	Summit	NJ	45-14
Darroch, Ronald E.	East Haven	CT	59-02	Zimmerman, William F.	Oregon City	OR	45-14N
Barbero, Albert L.	Pinehurst	NC	59-07	Ward, Donald K.	Hiawassee	GA	45-235
Givens, Charles A.	Warwick	RI	61-19	Meier, Clyde D.	East Moline	IL	45-335
Mushinski, Jerome S.	Shawnee	KS	61-22	Farr, Robert E.	Raymond	MS	45-415
Bloy Jr., Howard J.	Federal Way	WA	63-01	Hamilton III, David R. W.	Canton	OH	45-535
Harden, Franklin D.	Luray	VA	63-03	SAN MARCOS			
Hebert, Kenneth C.	Winter Park	FL	63-04	McConnell, Cecil	Sagle	ID	45-150
Hanson, Richard E.	Woodbury	MN	63-05	UNKNOWN SCHOOL			
Rutenbeck, Fred O.	Leucadia	CA	63-05	Harper, Joel A.	Austin	TX	41-00
Flatbush Jr., William E.	Houston	TX	63-09	Larsen, Victor H.	Kailua	HI	41-00
Ehrenberger, Edward D.	Sierra Vista	AZ	63-19	Larson, John V.	Austin	TX	41-00
Densmore, Joel Y.	Reno	NV	64-11	Murray, Earl W.	Newport News	VA	41-00
Kuhn, Wesley R.	Olympia	WA	64-16	Henry, Robert C.	Sun City	FL	42-00
Vest, Dempsey D.	Aledo	TX	64-19	Kucinski, Edward A.	Albuquerque	NM	42-00
Chamberlain, Peter W.	Rockport	TX	65-09	Meyer, Robert G.	Minneapolis	MN	42-00
Gillis, James H.	Greenville	FL	65-11	Morgan, Vernon P.	Portsmouth	OH	42-00
Goehring, Henry W.	Largo	FL	65-11	Peek, George W.	Avery	TX	42-00
Leach, Michael J.	Columbus	OH	65-11	Sanchez, Louis T.	Victorville	CA	42-00
Trefry, David A.	Goodyear	AZ	65-12	Butler, Thomas H.	Dallas	TX	43-00
Nelson, John T.	Mason	WI	65-15	Oster, Lewis H.	Sun City West	AZ	43-00
MATHER				Schaefer, Robert L.	Inver Grove Heights	MN	43-00
Harris, Raymond W.	Pocahontas	AR	67-00	Karpin, Jay H.	Battleboro	VT	44-00
Holden, Raymond D.	O'Fallon	IL	67-00	Hunt, Howard Lee	Holly Lake Ranch	TX	45-00
Menke, James R.	Canyon Lake	TX	67-00	Carlson, Hugh J.	Long Beach	CA	46-00
Kent, Gene A.	Richardson	TX	67-07	Powell, Billy D.	Austin	TX	53-06
PROFESSIONAL NAV				Malone, John D.	Universal City	TX	54-11
Guillon, Richard M.	Clemmons	NC	46-00	Cummings, William J.	Tucson	AZ	56-00

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