

**AIR FORCE ACADEMY CADET INTEREST
IN FLYING SPECIFIC AIRCRAFT**

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Air Force Academy Cadet Interest in

Flying Specific Aircraft

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Abstract

The question of whether Academy Cadets would prefer to fly Fighter-Attack-Reconnaissance (FAR) aircraft instead of Transport-Tanker-Bomber (TTB) aircraft was investigated by a survey of the pilot-qualified first-class cadets in the Class of 1979. The results indicate a preference for FAR for immediate assignment, but not in terms of long term or career assignments.

Air Force Academy Cadet Interest in
Flying Specific Aircraft

The Air Force's present undergraduate pilot training (UPT) program attempts to produce universal pilots potentially capable of being assigned to any weapon system in the United States Air Force. Such a broad based development of large spectrum of flying skills is not economically practicable in this day and age where flight training is more expensive than ever. These universal pilots are taught some flying skills that may not be used in their individual assignments following pilot training while other skills may receive only limited training.

Consideration of establishing a Specialized Undergraduate Pilot Training (SUPT) system has been made by the Air Training Command (ATC) with the intent of maximizing the training effectiveness, being as cost effective as possible, and producing pilots that are more qualified for their first assignments following pilot training. One concept is that at the end of the primary phase of pilot training, a decision is made as to whether the pilot trainee should continue pilot training in a track designed for fighter-attacker-reconnaissance (FAR) aircraft or one designed for transport-tanker-bomber (TTB) aircraft. At that time the student pilot would have more awareness about the profession of being a pilot, his instructor would have an opportunity to observe the student's flying

abilities, and the Air Force's projected pilot needs (TTB and FAR) would be more definitive. The student would be motivated to perform his best during primary training, consideration of his desires would not adversely affect his morale, and the retention of graduating pilots would be enhanced by placing them in the most suitable track commensurate with their demonstrated abilities and desires. Invariably there will be occasions in which the student's desires and abilities do not coincide, and his instructor who has observed his performance would have to counsel him into accepting that which is best in terms of his ability and the Air Force's needs.

Questionnaire

In considering personal preference as a factor in dual track assignment the belief that the FAR track would be overwhelmingly desired in lieu of TTB has been discussed. Because there was considerable disagreement in the officers' perceptions of the cadets' desires for flying assignments, a brief questionnaire was developed to actually determine the cadets' interest in one track or the other. (Appendix A).

The idea of SUPT is only in the development stage and not a reality; thus, care had to be taken not to lead the cadets into believing that they will be dual tracked and that SUPT was eminent. A valid rationale for the questionnaire was to determine the cadets' attitudes towards various aircraft and that information would be

used in the development of classroom materials about aircraft, assignments, and major air commands. At the same time, such information would be informative as to the Cadets' desires for assignment upon one track or another.

Five questions were asked. The first determined the cadet's current medical status: pilot, pilot waiverable, navigator, navigator waiverable, and non-rated. The second and third questions were aimed at determining which aircraft they would like (question 2) or dislike (question 3) most to be assigned to and fly at that particular moment in time. In answering 1 the cadets were asked to order their top three choices 1, 2, and 3: most preferred, second choice, and third choice. For question 2 they were to mark 9, 8, and 7 for most undesirable, next least desirable, and third least desirable. Question 4 was aimed at determining which aircraft they would realistically expect to be assigned to upon completion of pilot training, and question 5 asked what aircraft they would prefer on a long-term or career basis.

Method

The questionnaire was administered to first class (senior) cadets of the Class of 1979 during ethics training on Friday, 29 September 1978. Most all of the first classmen were present for this training except for several on athletic excusal and 537 pilot qualified cadets answered the questionnaire. Administering the questionnaire during a time that the first classmen were

already gathered for training was more palatable than calling a special formation for the questionnaire. Those absent from the ethics training were asked to complete the questionnaire the following week (Appendix B), and thirty-four pilot qualified cadets responded at that time.

To insure more straightforward responses to the questions the cadets were asked not to identify themselves by cadet name or control number; the responses were to be anonymous. The questions were printed on the answer sheet to reduce confusion in the selection of the twenty alternatives for questions 2 through 5.

Results

The responses were tabulated by a digitex scoring machine and are presented in Appendix C (question 2), D (question 3), E (question 4), and F (question 5). The total number of responses between questions and within questions varied because of some error in coding responses and because some cadets only answered questions 1 and 2.

The selections of individual aircraft were condensed by combining them into the categories of Strategic, Attack, Helicopter, Trainer, Cargo, and Fighter and subsequently further reduced to TTB, FAR and Other (helicopter and trainers). The responses for the pilot qualified and pilot waivable cadets are summarized in Tables 1 through 4.

Table 1

Responses of Pilot Qualified and Pilot Waiverable Cadets to Question #2:

"At this specific time in your career, which of the following aircraft would you MOST like to be assigned to and fly? Mark 1 beside your first choice (most preferenced), 2 beside your second choice, and 3 beside your third choice."

	<u>Strategic</u>	<u>Cargo</u>	<u>Attack</u>	<u>Fighter</u>	<u>Helo</u>	<u>Fighter</u>
1st Choice	17	178	34	273	40	21
2nd Choice	24	188	58	229	44	39
3rd Choice	50	188	83	179	30	48

	<u>TTB</u>	<u>FAR</u>	<u>OTHER</u>
1st Choice	195	307	61
	(34.6%)	(54.5%)	(10.8%)
2nd Choice	212	287	83
	(36.4%)	(49.3%)	(14.3%)
3rd Choice	238	262	78
	(41.2%)	(45.3%)	(13.5%)

Referring to Table 1, a statistical test of the differences in proportions indicated that desire for FAR at the present time is significantly greater than for TTB ($p < .001$) and desire for helicopter and trainer (OTHER) was significantly less than for either TTB or FAR ($p < .001$). The results are similarly significant when considering the cadets' second choices. But, on their third choices, OTHER was significantly less than TTB or FAR while there was no significant difference between TTB and FAR.

Table 2

Responses for Pilot Qualified and Pilot Waiverable Cadets to Questions #3:

"At this specific time in your career, which of the following aircraft would you LEAST like to be assigned to and fly?

Mark 9 for the least desirable, 8 for the next less desirable, and 7 for the third least desirable."

	<u>Strategic</u>	<u>Cargo</u>	<u>Attack</u>	<u>Fighter</u>	<u>Helo</u>	<u>Trainer</u>
9th Choice	383	23	28	13	14	63
8th Choice	218	46	97	23	25	124
7th Choice	151	101	111	23	35	120

	<u>TTB</u>	<u>FAR</u>	<u>OTHER</u>
9th Choice	406 (77.5%)	41 (7.8%)	77 (14.7%)
8th Choice	264 (49.5%)	120 (22.5%)	149 (28.0%)
7th Choice	252 (46.6%)	134 (24.8%)	155 (28.6%)

With regard to the least desirable aircraft to be assigned to and fly at the present time (Table 2) the TTB are significantly less desirable than the FAR or OTHER at the 9th, 8th, and 7th levels of choice (all $p < .001$).

Table 3

Response of Pilot Qualified and Pilot Waiverable Cadets to Question #4: "Realizing that not all UPT graduates get their first choice, which one of the following aircraft do you realistically expect to be assigned to upon completion of UPT?"

<u>Strategic</u>	<u>Cargo</u>	<u>Attack</u>	<u>Fighter</u>	<u>Helo</u>	<u>Trainer</u>
49	191	43	193	29	33
	<u>TTB</u>		<u>FAR</u>		<u>OTHER</u>
	240 (44.4%)		236 (44.0%)		62 (11.6%)

Table 4

Response of Pilot Qualified and Pilot Waiverable Cadets to Question #5: "After completing your first rated assignment following UPT, which one of the following aircraft would you like to be assigned to on a long term or career basis?"

<u>Strategic</u>	<u>Cargo</u>	<u>Attack</u>	<u>Fighter</u>	<u>Helo</u>	<u>Trainer</u>
10	231	30	201	36	25
	<u>TTB</u>		<u>FAR</u>		<u>OTHER</u>
	241 (45.0%)		231 (43.5%)		61 (11.5%)

The cadets' expectations of TTB or FAR assignments following upon completion of pilot training (Table 3) are not significantly different, and fewer cadets anticipate being assigned to OTHER than to TTB or FAR ($p < .001$).

In terms of desired aircraft to fly on a long term or career basis, cadets desire TTB or FAR over the OTHER ($p < .001$), but there was not significant difference between their desire for TTB or FAR.

Discussion and Conclusions

The hypothesis that cadets would prefer to fly FAR aircraft was supported in terms of immediate desires, but in terms of long

range or career desires it was not. At the time of the survey, cadets would prefer to fly the F-15/16 aircraft most (N - 258) followed by the C-141 (N - 104). In terms of least desired, only one aircraft clearly stood out, the B-52 (N - 357). In the category of next to least desirable there was a sizeable increase in number who identified the KE-135 (N - 122), FB-111 (N - 44) and the T-41 (N - 91). The lack of desire to fly T-41s might be, in part, a reaction to the recent T-41 training experienced by the cadets and also a desire to fly the "real" Air Force aircraft. While the tactical aircraft (F-15/16) might always appear exciting and desirable to the young future aviators, one might take care in developing information packages with regards to the Air Force's strategic aircraft so that they are not portrayed as totally undesirable because the need for strategic aircraft pilots will be with the Air Force for some time.

Despite their current desires for particular aircraft, the Academy cadets exhibited rather realistic expectations with regard to the types of aircraft they would most probably be assigned to upon completion of pilot training. A point of concern is what effects upon morale and/or retention are caused by the dissonance between the aircraft assignments desired and those expected. This difference seems to be somewhat resolved in the cadets' expressed desire for certain long term or career assignments. Looking at their responses to questions 4 and 5 in light of their desires,

reflected in questions 2 and 3, one sees that there is a sizeable increase in the numbers desiring cargo aircraft with a commensurate decrease in strategic aircraft. In the same fashion, the number of anticipated F-4 assignments after pilot training show a decrease on the long term question while the F-15/16 aircraft have a sizeable increase. However, in the category of cargo aircraft there is an overall increase, especially for the C-5 and C-9 aircraft. Much of this increase might be attributable to the young pilots planning to develop alternative career options or merely the shift from strategic to cargo aircraft.

In general, the results show a current preference for FAR over TTB aircraft but no significant difference between FAR and TTB with respect to career goals. Although there might not be a large difference between the proportions of cadets desiring TTB and FAR assignments, there should be considerable concern about the type of FAR and TTB aircraft desired or not desired. The rather considerable lack of desire for strategic aircraft assignments suggests the need for a carefully planned information program with respect to career in strategic aircraft to meet the future needs of the Air Force.

The results of this survey clearly indicate a need to determine the sources of cadet attitudes towards specific aircraft and serving in the various commands.

ATTACHMENT A
QUESTIONNAIRE

Military Training is interested in the Cadets' attitudes towards various aircraft so that the information about aircraft presented in the classroom will be compatible with the interest of the Cadets.

To help us in this matter we request that you answer the attached five question as honestly as possible.

PLEASE DO NOT GIVE YOUR NAME OR CADET NUMBER.

USE A NUMBER 2 (SOFT) LEAD PENCIL.

ATTACHMENT B
LETTER FOR MAKEUP

DEPARTMENT OF THE AIR FORCE
THE AIR FORCE CADET WING
USAF ACADEMY, COLORADO 80840



REPLY TO
ATTN OF: CWD

2 October 1978

SUBJECT: Flight Interest Survey

TO: CWDS

1. Attached are several Flight Interest Survey forms. The initial survey was given during ethics training on Friday, 29 September 1978. Numerous cadets were absent from this training and therefore did not complete this critical survey. As the Air Staff will be briefed on the results of this survey, it is imperative that the responses be representative of the entire Cadet Wing.

2. Please administer the attached survey to First Classmen in your squadron who did not attend Friday's ethics meeting. Individuals who were on athletic excusals or who attended the Kansas State football game should definitely be included in the group selected to take the questionnaire.

3. The answer sheets should be hand carried to DFBL for analysis NLT 0730, 4 Oct. If you have any questions contact Lt Col Koonce or Lt Col Schwank, DFBL, ext 3860.

A handwritten signature in cursive script, appearing to read "Kent Montavon".

KENT MONTAVON, Colonel, USAF
Deputy Commandant for the Cadet Wing

1 Atch
Survey Forms

ATTACHMENT C
RESPONSES TO QUESTION 2
BY AIRCRAFT

Pilots and Pilots Waiverable

At this specific time in your career, which of the following aircraft would you MOST like to be assigned to and fly?

	1st Choice	2nd Choice	3rd Choice
B-52	10	3	4
FB-111	6	7	19
KC-135	1	14	27
A-7D	2	11	26
A-10	30	42	35
A-37	0	0	5
AC-130	2	5	17
Support Helicopters	9	29	9
Rescue Helicopters	31	15	21
T-37/38	11	19	18
T-41	4	3	4
T-43	6	17	26
C-5	21	49	31
C-9	40	30	59
C-130	13	18	24
C-141	104	91	74
F-4	3	94	37
F-5	6	43	51
F-15/16	258	62	44
F-111	6	30	47

ATTACHMENT D
RESPONSES TO QUESTION 3
BY AIRCRAFT

Pilots and Pilot Waiverable

At this specific time in your career, which of the following aircraft would you LEAST like to be assigned to and fly?

	9th Choice	8th Choice	7th Choice
B-52	357	52	38
FB-111	2	44	46
KC-135	24	122	67
A-7D	2	7	15
A-10	12	33	37
A-37	10	30	36
AC-130	4	27	23
Support Helicopters	13	14	17
Rescue Helicopters	1	11	18
T-37/38	3	14	17
T-41	57	91	77
T-43	3	19	26
C-5	4	2	19
C-9	2	6	22
C-130	17	32	51
C-141	0	6	9
F-4	4	5	13
F-5	0	3	1
F-15/16	7	4	3
F-111	2	11	6

ATTACHMENT E
RESPONSES TO QUESTION 4
BY AIRCRAFT

Pilots and Pilot Waiverable

Realizing that not all UPT and UNT graduates get their first choice, which one of the following aircraft do you realistically expect to be assigned to upon completion of UPT or UNT?

B-52	30
FB-111	2
KC-135	17
A-7D	7
A-10	31
A-37	1
AC-130	4
Support Helicopters	10
Rescue Helicopters	19
T-37/38	32
T-41	1
T-43	0
C-5	2
C-9	3
C-130	32
C-141	154
F-4	52
F-5	1
F-15/16	138
F-111	2

ATTACHMENT F
RESPONSES TO QUESTION 5
BY AIRCRAFT

Pilots and Pilot Waiverable

After completing your first rated assignment following UPT or UNT, which one of the following aircraft would you like to be assigned to on a long term or career basis?

B-52	2
FB-111	6
KC-135	2
A-7D	2
A-10	27
A-37	0
AC-130	1
Support Helicopters	13
Rescue Helicopters	23
T-37/38	12
T-41	2
T-43	11
C-5	28
C-9	52
C-130	11
C-141	140
F-4	7
F-5	4
F-15/16	185
F-111	5

Acknowledgements

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